

From the Quarterly Review.

1. *The History of the Reformation in Scotland* by John Knox. Edited by DAVID LAING. 2 vols. 8vo. Edinburgh, printed for the Wodrow Society, 1848.
2. *Origines Parochiales Scotia; the Antiquities, Ecclesiastical and Territorial, of the Parishes of Scotland.* Edited by COSMO INNES, Esq. Printed for the Bannatyne Club. Vol. I., 4to. Edinburgh, 1851.
3. *Inquiry into the Law and Practice in Scottish Peerages; with an Exposition of our Genuine Original Consistorial Law.* By JOHN RIDDELL, Esq. 2 vols. 8vo. Edinburgh, 1842.

THE Wodrow Society, now deceased, deserved well of Scotland by its editions of Knox and Calderwood. Calderwood might be said to be a new work; but a correct and critical edition of Knox's History was scarcely less a desideratum. The first—printed at London by Vautrollier in 1586-7—was so full of blunders that its suppression by Whitgift is scarcely to be regretted so much as that a few copies got into circulation.\* The next, (London, 1644,) though superintended by David Buchanan, a Scotchman, and an industrious scholar, is still worse; for it abounds in wanton alterations and even additions. As Vautrollier's had offended Elizabeth's High-Church Archbishop, Buchanan's excited the jealousy of the Puritans. It was their tampering with it that moved the indignation of Milton:—

If the work of any deceased author, though never so famous in his lifetime and even to this day, come to their hands for license to be printed or reprinted; if there be found in his book one sentence of a venturesome edge, uttered in the height of zeal—and who knows whether it may not be the dictate of a divine spirit?—yet not suiting with every low decrepit humor of their own;—though it were Knox himself, the reformer of a kingdom, that spake it—they will not pardon him their dash. The sense of that great man shall to all posterity be lost, for the fearfulness or the presumptuous rashness of a perfunctory licenser.—*Areopagitica*.

Such a manipulator as David Buchanan was, however, more dangerous even than a "perfunctory licenser." A new edition was therefore wanted, not only to furnish accurate readings, and the apparatus of illustration which modern luxury and indolence require, but to restore omissions, cut out interpolations, and place the whole on a firm footing of authority. Mr. Laing has spared no pains upon his task. The first four books may now be perused as John Knox wrote them between the years 1559 and 1566; and the fifth is reduced to its proper grade of authority as a posthumous concoction out of his materials. The reader is saved all the trouble of referring to contemporary docu-

ments by plentiful notes, which he will not criticize severely for occasional over-minuteness. Much as Mr. Laing has done, however, he is entitled to still more credit for what he has refrained from doing. With sufficient zeal for his subject, with all its learning, and with an author provocative of opposition in every line, he has not turned aside to meet the hostile multitude, nor disfigured his margins with controversy.

Mr. Laing assures us that Knox was "of all persons the best qualified to undertake the History of the Reformation in Scotland, not only from his access to the various sources of information, and his singular power and skill in narrating events and delineating characters, but also from the circumstance that he himself had no unimportant share in most of the transactions of those times." (p. xxv.) But in this no doubt sincere opinion we cannot quite concur. Access to information on one side of affairs Knox undoubtedly had, and he was no mean master of narrative; but in all the highest qualifications of a historian he was utterly wanting. His was not the calm philosophic nature to balance counsels, to admit faults in his own party or merits in the other. The vehemence of his abuse, his hearty calling of names, destroys all trust in his fairness. It was not even an object with him to assume the virtue. Again, he did not know, or he despised, the tricks of composition. His book is inconsecutive, almost fragmentary—altogether without method. He says himself that he was regardless of times and seasons—meaning that he was not studious to state events in their right order; but he was also very indifferent as to the correctness of his quotations, and this even in the case of documents which he professed to give in full. Such ascertained licenses must greatly lessen the reader's general confidence:—we are haunted by suspicion even amidst his often highly animated sketches of men and of transactions. It is not as a history, in short, that the book is valuable. It is as the outpouring of the mind of one who was a chief mover and main actor in the greatest of the revolutions that a nation can undergo. It is not every great man that is born to act his history and to write it. The very qualities that fitted Knox for his mission disqualified him for setting forth to posterity the events he directed.

We cannot wonder at the ferocity of Roman Catholics against him; he earned it well at their hands; but we have always thought the vulgar censure of his violence by Protestants, ignorant and unjust. We lament as much as most the destruction of venerable churches, and the total annihilation of that goodly fabric of a hierarchy, to our mind the most legitimate as well as the most seemly dress that our common Christianity can wear; but we cannot place these mischiefs in comparison with the benefit which the Great Change conferred on Scotland; and if the circumstances of the country make it probable that the only alternative was a total demolition or entire restoration, down go the pride of St. Andrews and the beauty of Melrose—let not only prior and abbot but even dean and bishop perish—rather than society stand there as it stood before the Reformation.

\* Some of Vautrollier's readings are amusing. For "William Guthrie," he has "within gathered," (p. 233.) One of the Lollards of Kyle, "Adam Reid of Baskimming," he transmutes into "Adam reade of blaspheming." The conspirators of St. Andrews threw the keys into the "fowsie," i. e., fosse, the castle ditch. Vautrollier substitutes the *foule sea*, &c. &c.

Knox and his coadjutors were no destroyers of churches, as we have endeavored to show in a former number.\* With paramount objects in view—compelled to speak to the passions, and in the frenzy of a strife more deadly than war—we must not marvel that they could not always restrain what Knox himself calls “the rascal multitude” from the work of pillage and demolition. But we should be honest. The real enemies of ancient buildings in Scotland—whether pre-Christian relic, church, or castle—from Arthur’s Oven to Kinloss and Kildrummy—have been the successive lairds of later “improving” times. To make a “dike” or fill a drain, or at best to erect a staring abomination of a new mansion-house, the gray ancestral tower was triumphantly blown down with gunpowder. The mean barn built as a kirk by the “heritors” was supplied with its lintels and corner-stones from the mouldings of the little chapel where their forefathers worshipped. It is but fifty years since an Edinburgh architect employed to repair the nave of the cathedral at Brechin, still used as a parish-church, begged earnestly for leave to remove “that useless old tower” which darkened a window. Reader! it is the Round Tower of Brechin, of mysterious antiquity—the connecting link of Irish and Scotch history! We believe Scotland was indebted to Lord Panmure and the late eccentric Laird of Skene for averting that disgrace.

There was no dandling into life of the Scotch Reformation, no basking in the sunshine of princely favor. The speculative tenets condemned by the Reformers were calculated to be popular, appealing to the feelings and imagination. They were upheld by an ancient hierarchy which still numbered among its servants men of sound theological learning, armed with all the weapons of the schools. Above all, they had the support of a court which dressed by that of France, and was not indisposed to have used the argument of Charles IX. with the heretics. Against such a defensive array mere demonstration of the doctrinal errors of Romanism would have been ineffectual—in fact, unheard. But every man listened when the new preachers denounced the lazy friars of the next convent, the vices of the proud sensual prelates, the whole body of the clergy living in open violation of the vows of their order. Burgher and yeoman pricked up their ears when they were told—“These are the men who revel on the tithes, the produce of your toil, who make rich out of your forced purchase of indulgences and dispensations, who tax your marriages, your christenings, all the rites you consider needful for salvation; suck you like leeches while in health, and beset your deathbeds to extort donations; who strip orphans and widows bare, rather than the Church should go without her burial-dues; who live a life of riot and luxury; who debauch your wives, and take your daughters for concubines!” Those were the topics that effectively stirred the popular mind. Knox himself continually mixes and confounds the doctrines of the Church and the practice of the churchmen. Describing the effect of Patrick Hamilton’s martyrdom, he says—

And so within short space many began to call in doubt that which before they held for a certain verity; inasmuch that the University of St. Andrews and St. Leonard’s College, principally by the labors of Mr. Gawin Logy, and the novices of the abbey by the

superior, (Wynrame,) began to smell somewhat of the verity and to espy the vanity of the received superstitions. Yea, within few years after, began both black and gray friars publicly to preach against the pride and idle life of bishops, and against the abuses of the whole ecclesiastical estate.—Knox, p. 36.

On the other hand, we find some of the first agitators of Reform by no means prepared to overturn the ancient faith. One of the keenest preachers against the clerical irregularities was Friar William Airth, a bold man, after Knox’s own heart, who dwells with much delight upon his sermons, and, lamenting that he remained a papist, observes, “But so it pleaseth God to open up the mouth of Balaam’s own ass, to cry out against the vicious lives of the clergy of that age.” Airth was preaching at St. Andrews before all the doctors and masters of the University. The “theme” of his sermon was, “Veritie is the strongest of all things.” His discourse was of “cursing”—the dread excommunication of the Church—

how, if it was rightly used, it was the most fearful thing upon the face of the earth, for it was the very separation of man from God. But now, (said he,) the avarice of priests and the ignorance of their office has caused it altogether to be vilipended. For the priest, whose duty and office it is to pray for the people, stands up on Sunday, and cries—“One has lost a spurtill [a porridge-stick;] there is a flail stolen from beyond the burnie; the goodwife has lost a horn-spoon. God’s malison and mine I give to them that knows of this gear and restores it not!”

To show how the people mocked their cursings, he told “a merry tale” of some gossips over their Sunday drink, who asked in jest, “What servant will serve a man best on least expenses?” and solved the riddle thus:—“Know ye not how the bishops and their officials serve us husbandmen? Will not they give us a letter of cursing for a plack, to last for a year, to curse all that look over our dyke! and that keeps our corn better nor the sleeping boy that will have *three shillings of fee, a shirt, and a pair of shoon in the year.*” Again, the friar—having as Knox reports, “declared what diligence the ancients took to try true miracles from false”—proceeded thus:—

Now the greediness of priests not only receives false miracles, but also they cherish and fee knaves for that purpose, that their chapels may be the better renowned, and their offerings may be augmented. And thereupon are many chapels founded; as that Our Lady were mightier, and that she took more pleasure in one place than another; as of late Our Lady of Carsgrange has hopped from one green hill-lock to another. But, honest men of Saint Andrews! if ye love your wives and your daughters, hold them at home, or else send them in honest company; for if ye knew what miracles were shown there, ye would neither thank God, nor our Lady!

“Thus” (adds Knox) “he merrily taunted their trusts of whoredom and adultery.” Another “bourd” in a sermon on the Abbot of Unreason could not be transferred to any modern page. “But here follows,” says Knox, “the most merry of all.” During the imprisonment of Sandie Furrour, Sir John Dingwall, “according to the charity of churchmen, entertained his wife. For the which cause, at his returning, he spake more liberally of priests than they could bear, and so was he denounced to be accused of heresy and called to his answer to St. Andrews.” The man “understood nothing of religion,” and met the

\* See Q. R., vol. lxxxv., pp. 148, &c.

charges against him with an onslaught on his judges. The first article was that he despised the mass. His answer, "I hear more masses in eight days than three bishops there sitting say in a year." Accused, secondly, of contempt of sacraments: "The priests," quoth he, "are the most common contemners of sacraments, and especially of matrimony;" and "that he witnessed by any of the priests there present, and named the men's wives with whom they had meddled"—but especially Dingwall, who had seven years together abused his own wife and consumed his substance; adding, "For God's sake, will ye take wives of your own, that I and others whose wives ye have abused may be revenged upon you?" Then the "old Bishop of Aberdeen, thinking to justify himself before the people, said—*Carl, thou shalt not know my wife.* Alexander answered—*My lord, ye are too old; but with the grace of God I will drink with your daughter ere I depart.* And thereat was smiling of the best, and loud laughter of some; for the bishop had a daughter married with Andrew Balfour in that same town."—pp. 36—44.

As we may not have another opportunity, let us here give a fair specimen of Knox's narrative, which, partly from the uncouth spelling—for the language is almost English—is not known in England so much as it deserves. We could not select a more characteristic passage than the picture of the tumult at Edinburgh on St. Giles' day, 1558:—

Yet would not the priests and friars cease to have that great solemnity and manifest abomination which they accustomedly had upon Saint Giles' day; to wit, they would have that idol borne, and therefore was all preparation necessary duly made. A marmoset idol was borrowed from the Gray friars (a silver piece of James Carmichael was laid in pledge.) It was fixed with iron nails upon a barrow called their *fertour*. There assembled priests, friars, canons, and rotten papists with tabours and trumpets, banners and bagpipes; and who was there to lead the ring but the queen regent herself with all her shavelings for honor of that feast! West about goes it, and comes down the High-street and down to the Canon-cross. The queen regent dined that day in Sandie Carpetyne's house, betwixt the Bows, and so, when the idol returned back again, she left it and passed in to her dinner. The hearts of the brethren were wondrously inflamed, and, seeing such abomination so maintained, were decreed to be revenged. They were divided into several companies, whereof not one knew of another. There were some temporizers that day, who, fearing the chance to be done as it fell, labored to stay the brethren. But that could not be; for immediately after that the queen was entered in the lodging, some of those that were of the enterprise drew nigh to the idol, as willing to help to bear him; and getting the fertour upon their shoulders, began to shudder, thinking that thereby the idol should have fallen. But that was provided and prevented by the iron nails, as we have said; and so began one to cry, *Down with the idol! down with it!* and so without delay it was pulled down. Some brag made the priests patrons at the first, but when they saw the feebleness of their god—for one took him by the heels, and dashing his head to the causeway, left Dagon without head or hands, and said "Fy upon thee, thou young Saint Giles, thy father would have tarried four such!"—this considered, we say, the priests and friars fled faster than they did at Pinkie Cleuch. There might have been seen so sudden a fray as seldom has been seen among that sort of men within this realm; for down goes the cross; off goes the surplice; round caps corner with the crowns. The gray friars gaped; the black friars blew; the priests panted; for such a sudden fray came never

among the generation of Antichrist within this realm before. By chance there lay upon a stair a merry Englishman, and seeing the discomfiture to be without blood, thought he would add some merriness to the matter, and so cried he over a stair, "Fy upon you, whoresons, why have you broken order? Down the street ye passed in array and with great mirth. Why flee ye, villains, now, without order? Turn and strike every one a stroke for the honor of his god! Fy, cowards, fy! ye shall never be judged worthy of your wages again!" But exhortations were then unprofitable, for after that Bel had broken his neck there was no comfort to his confused army.

The queen regent laid up this amongst her other mementos, till that she might have seen the time proper to have revenged it. Search was made for the doers, but none could be deprehended; for the brethren assembled themselves in such sort, in companies, singing psalms and praising God, that the proudest of the enemies were astonished.—p. 259.

Many excellent persons, with a high estimate of the importance of an episcopal church, and proportional regret for the result of the Scotch Reformation, are ready to abandon the whole body of regular clergy as indefensible. They give up monk and friar, and would entrench themselves for the defence of the "working parsons"—the secular parochial clergy with its due gradations up to the mitred successors of the apostles. But they do not see how the matter stood. The religious houses had swallowed up the parish livings. In the course of four centuries the monks had engrossed not only the patronage of almost all the churches—they were not only legally the rectors of them, but they monopolized the vicarage dues in most cases also; and the duties, such as they were, were discharged by an outlying brother of the dominant convent, or by a poor vicar pensioner ground down to the lowest amount of maintenance and a station quite degraded. By this it came to pass that the body of rural clergy was in whole districts non-existing, in the rest inefficient and contemptible.\*

How the dignitaries and heads of the seculars filled their high station it may still be not impossible to ascertain. Any candid inquirer will of course discard mere assertions and stories, except where real evidence from some unsuspected quarter corroborates or fills them up.

Some time before the breaking out of the storm several eminent churchmen were laboring for the improvement of the lives and learning of the body. They did not see the full extent of the evil, nor suspected with what a speedy and complete retribution it was to be visited; but in their own spheres a few, both regular and secular, were anxious to raise the standard, and to remove the scandal. Foremost among these were Robert Reid, Bishop of Orkney and abbot of two northern monasteries, known as the founder of libraries, the introducer of foreign schoolmasters and gardeners,

\* On this subject the reader will find very copious details in the *Origines Parochiales Scotiæ*—a work named in our present list, but which we hope to review in detail when completed. We cannot adopt some of the editor's genealogical views—but, apart from them, the unwearied industry of his research and clear arrangement of its often novel fruits well justify the late Lord Jeffrey's patronage—for the cost of the printing, &c., was that veteran critic's last contribution to the Bannatyne Club. We are glad that they have allowed extra copies to be struck off *pro bono publico*, and would fain see the example followed by all clubs of this sort whenever they are fortunate enough to produce volumes of solid worth.

the restorer of the buildings as well as of the discipline of the cloister—and Alexander Myln, Abbot of Cambuskenneth, and first President of the College of Justice, instituted by James V. in imitation of the law courts of France—a rare union of the man of business and man of letters, the lawyer, and reformer of learning. These and some others perceived the importance of providing better arms for resisting the new doctrines of England and Germany, and they devoted their revenues and exerted their influence for the restoration of letters. But the morals of the great ecclesiastics were beyond their reach and aim. An attempt at reformation there would have stirred up an opposition too formidable for so small a minority to cope with.

The writings of some whom they employed in the work of education give us a very pleasing impression of these reforming churchmen, and, at the same time, carry more conviction than all the exaggerations of their enemies, of the absolute decay of instruction among the lower clergy—*literarum studium obliteratum penitus (Richardini exegesis, Paris, 1530.)*

One of the chief and most successful of the opponents of Knox was Ninian Wingate, a priest and schoolmaster of Linlithgow, whose main occupation may account for what seems stilted in his style—not objected to, however, in his own time. In his Tractate addressed to the queen, pastors, and nobility (Edin. 1562)—to quote one passage out of many—he thus handles the churchmen:—

Your dumb doctrine in exalting ceremonies only, keeping in silence the true word of God necessary to all men's salvation, and not resisting manifest errors, to the world is known. What part of the true religion by your slothful dominion and princely estate is not corrupted or obscured? Have not many, through lack of teachment, in mad ignorance misknown the duty which we all owe to our Lord God, and so in their perfect belief have sorely stammered? Were not the sacraments of Christ Jesus profaned by ignorants and wicked persons neither able to persuade to godliness by learning nor by living? Of the which number we confess the most part of us of the ecclesiastical state to have been, in our ignorant and inexperienced youth, unworthily by you admitted to the ministration thereof. Were ye commanded in vain of God by the mouths of his prophets and apostles to watch attently and continually upon your flock and know diligently the same by face? Or gave the princes of the earth yearly rents (as the disciples in the beginning sold their lands and gave the prices thereof unto the apostles) to the end that every one of you might spend the same upon his dame Dalilah and bastard brows? And albeit it chance oft to the infirmity of man that he fall asleep when he should most wake, and be given to pastime when he should most diligently labor—but yet, oh merciful God! what deadly sleep is this that has oppressed you, that in so great uproar, tumult, and terrible clamor, ye wake not forth of your dream! Awake! awake! we say, and put to your hand stoutly to save Peter's ship.—Ed. 1835, pp. 5-7.

Since we have introduced Wingate to our readers, we will give also an extract from his address “to the Calvinist preachers:”—

Ye misknow not the monastic life to have stood specially in the renouncing of the world, and pleasures of the body, not only from unlesum [unlawful] whoredom, but from marriage sometime to them lesum, to the intent that they might thereby more easily wait on prayer and godly study; not refusing honest corporal exercise, by example of St. Paul, to sustentation

of their bodies. Yet—notwithstanding in our days the same was abused among many in idleness and wealthy life, and cloaked with glistening ceremonies of garments and such like, more than in true religion—*why have ye shorn away in this matter the wheat together with the vetches? Why have ye knocked down the monasteries and principal policy of this realm, and counselled the rents thereof unjustly to be appropriated to others? Of the which monasteries every one by a godly reformation, besides a company to wait on prayer, might have been a college of godly learning, to the support of poor students.*—*Ib.*, p. 110.

George Cone, one of the accomplished scholars whom Scotland poured forth from her unendowed colleges to seek fortune and fame on the Continent in the beginning of the seventeenth century—he also a zealous adherent of the old faith—writes in nearly the same strain:—

Vulgus autem naturā pigrum et iners, nec cœlestibus rebus idoneum, ut gravem aliis serendi et mendi necessitatem fugeret, nusquam securus quam in monasteriorum claustris asylum conspiciens, eō tanquam in montem sacrum secedebat. Quamprimum vero ex illā hominum facie quispiam literarum levem aliquam notitiam sibi parasset, hujus aut illius e proceribus adjunctus patrocinio, nil minus quam quid sacrosancti muneris esset cogitabat; sed ventrem replere, symmata dilatare, et sublimiora occupare subsellia. His omnibus accedebat libido impotens, sacratoris vitæ morumque lues tetrica. In multorum sacerdotum ædibus scortum publicum; per noctabant in tabernis viri Deo dicati: nec a sacrilego quorundam luxu tutus erat matronarum honos aut virginalis pudor. Quid plura? Celebris illa populū erga religiosos veneratio in ludibrium conversa: pro mendicantibus manducantes dicti fratres. Et si quæ nova ad irrisionem vocabula ab otiosis agyrtis excogitari poterant, monasticæ disciplinæ sectatoribus, modo dictiorum sale et aceto adpersa, nihil fuit pensi, aptabantur.—*Conæus de duplici statu Religionis, Romæ, 1628, p. 90.*

But we know from even better authority than the contemporary champion of the old faith against the spreading innovations, or the Scotch Romanist of the next generation, what was the state of the secular clergy immediately before the Reformation. The bishops themselves, at the time when the new doctrines were agitating the minds of men, were almost without exception living in open violation of their ordination vows; and the most cultivated, the most amiable among them, were in this respect not a whit purer than the others.

To their secular accomplishments Sir Ralph Sadler, a shrewd observer, writing in the end of James V.'s reign, bears witness:—

I see none among the lay nobles that hath any agility of wit, gravity, learning, or experience to take in hand the direction of things: so that the king, as far as I can perceive, is of force driven to use the bishops and his clergy as his only ministers. They be the men of wit and polity that I see here.—*Negotiations in Scotland, p. 61.*

It was not for such men “of wit and polity” that vows of temperance and chastity were to be enforced. They were only too free—

They have great prerogatives,  
And may part aye with their wives  
Without divorce or summoning  
Then take another without wedding.

Such of them as were contented with one woman were esteemed virtuous; nay, ladies of good condition thought it no shame to live as their avowed

concubines, and found the sympathy of society not averse to such a departure from the celibacy which the church pretended to enforce. These things are brought more home to us in the domestic history of a narrow kingdom;—but the condition of the clergy was not materially different in other countries of Christendom before the Reformation had produced a change of morals far beyond the widest spread of its doctrines.

The head of the Scotch hierarchy at its most eventful period was David Beaton, Archbishop of St. Andrews, Apostolic Legate and Cardinal—the impersonation of the faults and virtues of his age and order. Of a good gentleman's family, nephew to the reigning archbishop, he was educated carefully at Paris, where he continued for ten years, attracted the notice and gained the confidence of the Regent Albany, and returned only to fill the highest offices of diplomacy and state. His success in life, his favor at the French court, his paramount influence over successive rulers of his own country, prove his ability better than the encomiums of Archibald Hay, the principal of his newly-endowed college at St. Andrews, whose warning, however, is remarkable, that the morals of all the churchmen of the kingdom depend upon him—*Ecclesiasticorum omnium in regno Scotia mores a te pendent, ut si quid peccent rationem reddas Christo cuius vicem geris in eâ regione*. Beaton was the Wolsey of Scotland. If he dilapidated his benefices to enrich his family, he was also a patron of letters and learned men. He was zealous for the church, and as unscrupulous in the use of means as all the other leading men of that age on both sides of the religious struggle. Undoubtedly, if he had lived, the reformers would have had a still harder fight for the victory. He was the leader of society and acceptable everywhere. The irregularities of his life were not censured until the shout of the Reformation was heard to call to account “the dumb dogs of bishops.” Men looked upon him as the able statesman, the lord of princely revenues, the most powerful person in the kingdom—as anything but the mere ecclesiastic and man of God. The popular indignation against the judge and executioner of Borthwick and Wishart has overborne the sympathy that must have otherwise attended the murder of the cardinal. He lives in Scotch story as “the bloody beast,” the profligate sensualist, that Knox has painted him. A recent writer, Mr. Lyon, tells us, “as to Beaton's mistresses, the number would appear to be immense, if we could trust the peasantry of Forfarshire, who point out half the towers in their county as having been the residences of these ladies.”\* This very charitable Protestant proceeds to treat the cardinal's breach of chastity as, at worst, a matter of doubt; and another, bolder still, affirms specifically that “he was a widower previous to his entering into holy orders.” There is, however, no foundation for the assertion that he

was ever married. He lived with a concubine, the daughter of an old baronial house, during the greater part of his life; and she survived him for thirty years. The offspring of that connection were numerous; some of the sons were dignified churchmen—others laymen, who founded families in Fife and Angus. Three of these gentlemen had letters of legitimation under the Great Seal, on the 4th November, 1539. For not less than four of their sisters, all taking their father's name and all in recorded documents setting forth his style and rank as honorable to them, large dowers found matches among the best of the Scotch nobility and gentry. A capital picture of Beaton, unknown to Pinkerton, formerly in the Scots college at Rome, now hangs on the walls of the Roman Catholic college at Blairs in Aberdeenshire. It is in his doctor's bonnet—painted probably before he obtained the cardinal's hat; but the brown hair is slightly silvered, and the whole aspect bespeaks a man past his youth. His broad brow and dark eye, clear northern complexion, and high features, make up on the whole a remarkably handsome face, with an undeniable air of nobility and command, but not without a dash of sensuality.

The chair of the murdered cardinal was filled by John Hamilton, natural son of the first Earl of Arran. Mr. Laing says his catechism, printed at St. Andrews in 1552, “exhibits a solitary effort on the part of the Roman Catholic clergy to convey spiritual instruction, and is most creditable to his memory.” p. 124. This archbishop lived openly with the wife or widow of his kinsman, Hamilton of Stenhouse. That lady, known as “Lady Stenhouse,” or “Lady Gilstown,” affected no concealment. Among the goods and chattels inventoried in her testament, confirmed at Edinburgh in 1575, are specified *three grants of legitimation* in favor of as many bastard children by his Grace.

Contemporary with Beaton, and assisting in his efforts to put down the new doctrines, was William Chisholm, Bishop of Dunblane from 1527 till 1564. Knox styles him the “incestuous Bishop of Dunblane.” p. 63. We know from a more unprejudiced authority that, “being a great adversary to the new Reformation, he alienated the episcopal patrimony of this church to a very singular degree, most of which he gave to his nephew, Sir James Chisholm of Cromlix. He likewise gave great portions to James Chisholm of Glassengall, his own natural son, and to his two natural daughters, one of whom was married to Sir James Stirling of Keir, and the other to John Buchanan of that ilk.”—*Bishop Keith's Catalogue of Scotch Bishops*.

Robert Stuart was elected Bishop of Caithness in 1542. He was brother of the Earl of Lennox, Darnley's uncle, and eventually Earl of Lennox himself, and had the bishopric and other church preferment merely as convenient provision for his maintenance. It is doubtful if he ever received ordination; but he did not scruple to concur in consecrating a bishop. He had in early life a natural daughter—married to Robert Auldjo; and after the Reformation he took to wife the profligate and impudent Elizabeth Stewart, the daughter of the Earl of Atholl, who divorced him on the plea of impotency, that she might marry her paramour, Arran, the king's minion.

In those times of brooding revolution the bishopric of Ross was held successively by several men of eminent qualities. David Panter, consecrated

\* History of St. Andrews, Edin., 1843. Mr. Lyon is a clergyman of the Episcopal Church in Scotland, which he loves well, if not wisely. While he endeavors to palliate the flagrant immorality of the prelates of the time of the Reformation, the real destroyers of the church, he takes up Spelman's old position, and thinks he has proved that the special vengeance of Heaven lighted on all who were partakers of the spoil, and that it was shown in the violent death of each individual or “the failure of his male issue.” This last theory, at all events, is a mere dream. Look either to the English or the Scotch peerage book at the present hour.

in 1546, "a person," says Bishop Keith, "of most polite education and excellent parts," was one of a family of statesmen and scholars. Knox admits "the public report of his learning, his honest life, and his fervency and uprightness in religion," (p. 105.) though, at a later period, when he finds him in the ranks of his opponents, he calls him "that belly-god," and says "he departed eating and drinking, which, together with the rest that thereupon depends, was the pastime of his life." p. 262. Sir James Balfour styles him a "notable adulterer," and Mr. Riddell, in his "Remarks upon the Peerage Law of Scotland," unfortunately supports the testimony of Balfour, and further connects the bishop with one of the strangest and darkest stories to be found even in Scotch family history. Buchanan gives the first act of the tragedy. William, the third Lord Crichtoun, in revenge, it is said, for the debauching of his wife by James III., devoted himself to captivate the king's youngest sister, Margaret, a princess of great beauty, with the temperament of her family, *et consuetudine fratris infamem*. He succeeded in his purpose, and the fruit of that amour was Margaret Crichtoun, a lady who inherited the passions and misfortunes of her lineage. She was wedded successively to two citizen burgesses of Edinburgh, and thirdly to George, Earl of Rothes, by whom she had a large family. She had lovers besides, and among them Patrick Panter, Abbot of Cambuskenneth, Secretary of State, the first scholar and diplomatist of his age. It was the brave fashion then in Scotland to give children the name of their real or supposed father, not of him *quem nuptiæ demonstrant*, and, of the offspring of this intercourse between the royal countess and the accomplished abbot, one was David Panter, afterwards Bishop of Ross. He was carefully educated and launched into the world by the abbot, whom he succeeded in his office of secretary as well as in his power of wielding that useful diplomatic Latin which the learned Ruddiman so much esteemed. It would have been strange if, come of such a race, he had proved a model of continence. But we may surmise that a MS. authority, quoted by Mr. Riddell, errs in a generation, when it asserts that "Margaret Crichtoun was divorced by George, Earl of Rothes, because when he is ambassador she had a bairn to Panter, Bishop of Ross." (*Remarks*, p. 183.) Of the divorce itself there is no doubt; but the paramour, it must be hoped, was her old lover, the Abbot of Cambuskenneth, whom the chronicler confounds with their son!—Another Bishop of Ross, after a very short interval, was the well-known John Leslie, the faithful servant of Queen Mary and the elegant historian of his country, a person so admirable in all other respects, that his breach of his ordination-vows shows both the sad effects of the example of a whole society and the danger of making a law so hard upon human nature that the sympathies of mankind are in favor of breaking it.

Patrick Hepburn became Bishop of Moray in 1535. This was the "prelate, or prelate's peer," of whom, while Prior of St. Andrews, Knox relates the "merry bound" which we have not ventured to reproduce. He was the son of an Earl of Bothwell before that name had become hateful to Scotland. He held the office of secretary for some years, and rich benefices in the church. But he is chiefly known as the bishop who retired to his northern castle-palace of Spynie, and set the Reformation at defiance—in this more honest than most of his contemporaries, who complied with the

change of religion that they might continue to hold their benefices and legalize the children of their concubinage. He lived long enough to dilapidate his great bishopric and to provide for a very large family, whose several legitimations stand on record.

The last of the ante-reformation bishops of Argyll was Robert Montgomery, a son of the first Earl of Eglintoun. He was promoted to the see in 1531, and on the 9th of July, 1543, letters of legitimation under the privy seal were granted in favor of Michael, Robert, and Hugh Montgomerie, "bastard sons of the reverend father in Christ, Robert, Bishop of Argyll."

The Bishop of Galloway of those times was a person of greater notoriety—namely, Alexander Gordon, brother of the *fat Earl of Huntley* who was smothered in his armor at the field of Corrichie. He was early thrust into several good benefices, and held by turns the Abbacies of Icolmkill, Inchaffray, and Glenluce, the Bishoprics of Caithness and of the Isles, and the Archbishopric of Glasgow. These successively slipped from him, and he was at length content to take the see of Galloway with the airy dignity of Archbishop of Athens. However otherwise unepiscopal, he was not one of Knox's dumb dogs. Calderwood has preserved a sermon preached by him in the High Church of Edinburgh in 1571. He was to admonish the citizens to put up prayers for Queen Mary. Hear the bishop:—

She is a lawful magistrate, seeing her father was a lawful king, and her mother likewise an honorable princess, and she born in lawful bed. This for the proof of my argument that she ought to be prayed for. And further, all sinners ought to be prayed for. If we should not pray for sinners, for whom should we pray—seeing that God came not to call the righteous, but sinners to repentance? St. David was a sinner, and so is she; St. David was an adulterer, and so is she. St. David committed murder in slaying Uriah for his wife, and so did she. But what is this to the matter? . . . Is not my Lord of Morton on their side? Is not my Lord of Argyll on our side? Nay! brethren, nay! for I confess myself, yea, this foul carcass of mine, to be most vile carrion and altogether given to the lusts of the flesh; yea, I am not ashamed to say the greatest trumper in all Europe, until such time as it pleased God to call upon me and make me one of his chosen vessels upon whom he has poured the spirit of his Evangel; and as candles when lighted are set upon high places, so shall I show the gifts God hath given me among you.

This frank prelate was queen's man or king's man as each party was in power; he joined the Reformation that he might marry Barbara Logie, his mistress, and make his children by her, legitimate; but loved the benefices of the old church well enough to transmit them to his sons, two of whom, one after the other, held his bishopric of Galloway, and two others successively got possession of his secularized abbacy of Glenluce.

Of the Bishops of Dunkeld, Gawin Douglas, the high-born scholar and poet, having lived according to what might then be called the license of his order, died in 1522. George Crichtoun succeeded him, "a man," says Archbishop Spottiswoode, "nobly disposed, and a great housekeeper, but in matters of his calling not very skilled." It was he who said to one of his vicars, whom he was persuading to leave his reforming opinions, that "he thanked God he knew neither the Old nor the New Testament, and yet he had prospered well enough all his days."

The labors of the Spalding Club have made ecclesiastical students well acquainted with the successive prelates in the see of Aberdeen. During the half-century preceding the Reformation it was held by some of the most remarkable men whom Scotland has produced. Bishop William Elphinston was a churchman after the antique model. He was a lawyer, a statesman, and a courtier of the highest influence and power, yet never sacrificed his diocesan duties to secular cares, nor allowed the fashion of the court to secularize his life and habits. "With manners and temperance in his own person befitting the primitive ages of Christianity, he threw around his cathedral and palace the taste and splendor that may adorn religion. He found time, amidst the cares of state and the pressure of official duties, to preserve the Christian antiquities of his diocese, and to collect the memories of those old servants of the truth who had run a course similar to his own, to renovate his cathedral service, and to support and foster all good letters." The breviary of Aberdeen, compiled as well as printed by him, in 1509, when printing was not a commonplace operation, will serve as an enduring memorial of his worth; and his picture, preserved in the college of which he was the munificent founder, perhaps the oldest portrait in Scotland, fixes in our memory the great prelate and minister of state, as the thoughtful, devout, and even ascetic churchman.

Gavin Dunbar, consecrated as Bishop of Aberdeen in 1519, was a lawyer and politician like Elphinston, and, like him, munificent to his church and diocese. As the builder of the bridge across the Dee, which has already seen the downfall of so many modern toy-bridges, and as the careful executor of Elphinston's undertakings, his memory is still held in respect in the stately old city which owes so much to him. He was a zealous assistant of the cardinal in suppressing heresy, and no more scrupulous as to the means than was customary in that age. His mixture with the crooked politics of that unprincipled court sufficed to secularize him, and, however we may doubt the testimony of Knox concerning "the old Bishop of Aberdeen," the impudent allusion of Furrow to his daughter, Mistress Balfour, (*supra*, p. 431,) plainly pointed to what must have been a common scandal.

In 1546 William Gordon, a son of the noble family of Huntley, was made Bishop of Aberdeen. Bishop Leslie, who was one of his chapter, describes him as "a prelate of good living"—marking that his own standard of good life in a bishop was not lofty. The records of the see, in his time, are full of signs of the approaching storm. They show us steps made in two directions. There are a few feeble efforts by churchmen to meet the popular clamor for reforming the lives of the clergy—to furnish instruction and especially preaching to the people—to set their house in order. On the other hand, it was felt that the fabric was tottering, and the lords of the church rushed eagerly to scatter some of the booty among their families and kindred, and a part to make friends of "the mammon of unrighteousness." The registers of Aberdeen are full of charters and leases, contrived for dilapidating the benefices of the see. A still more notable document of Bishop Gordon's incumbency, however, is a really respectful and affectionate address to him by the dean and chapter (dated January 5, 1558) urging—

*Imprimis*, that my Lord Bishop cause the kirkmen within his diocesis to reform themselves in all their

slandrous manner of living, and to remove their open concubines, as well great as small. *Secundo*, that his lordship will be so good as to show edificative example—in special in removing and discharging himself of the company of the gentlewoman by whom he is greatly slandered; without the which be done, diverse that are partners say they cannot accept counsel and correction of him which will not correct himself. &c. &c.—*Reg. Aberd.*, lxi.

It is remarkable that Lindsay, in his *Tragedie of the Cardinall*, where he means to rake up every ground of reproach against Beaton, omits all allusion to breaches of chastity. We cannot doubt the cause. The offence was so common that to dwell upon it would have lowered the tone of horror with which the poet wished to surround his subject. Among other results of the superior education of churchmen, and that citizenship of the world which then belonged to them, it had come to pass that great prelates, directing the business of the state, heading factions, often leading them in the field, appeared to be unfrocked, and ceased to be regarded as ecclesiastics. It was not only, however, nor even chiefly, by this entire secularizing and violation of their vows, that the clergy alienated their flocks. Through several centuries the exactions of the Church had been steadily increasing. Offerings, originally voluntary, had been converted into dues of which she compelled payment. Money was exacted at all great festivals; a heavy tax was levied on every event from baptism to burial; even afterwards the heavy hand of the priest was there. If the deceased was wealthy, the "quot of his testament" formed a large deduction from the succession. If poor, still "the heriot and the umaist cloth," i. e., the best animal and the richest garment, were taken from his widow and orphans "for pious uses."

But of the innumerable evils of a system which forced the people to regard the Church as an extortionate oppressor, perhaps the greatest was the state of the law of marriage. Persons within eight degrees of consanguinity—in other words, who had had a common great-great-grandfather, or great-great grandmother—might not legally wed. But it was not the relation by birth alone that barred marriage. It was forbidden also to parties within eight degrees of affinity—that is, to those whom marriage, or even an illegitimate intimacy, connected within those degrees. The prohibition was further extended to all coming within the same degrees of each other through *spiritual relation*, or that created by baptism—which affected not only the wide cousinhoods of the *baptisans* and *baptisatus*—but the connexions arising from the relation of godfather and godmother, as such, in regard to each other. The effects of such a tyranny must have been felt doubly in a country so narrow and so distant as Scotland. The Archbishop of St. Andrews, writing in 1554 for the information of the Pope, stated that such was the cousinship among the Scotch families, it was almost impossible to find a match for one of good birth (*honestæ vel generosæ familie*) that should not come within some of the prohibited degrees. The evil of this, says the archbishop, is, that "men marry on the promise or hope of a dispensation to be procured afterwards, but, tiring of the connection, either divorce their wives, or at once put them away under pretext of the want of dispensation, and their inability to afford the expense necessary for procuring one." It was not to be expected that his grace should dwell on the real hardship of that expense.

Marriage became in fact a temporary contract, or worse, a bargain from which either party might break at pleasure. It was in theory indissoluble; but when both spouses or either tired of the bond, nothing so easy as to find or make an impediment which proved it null from the beginning. If by an uncommon chance the man and woman were not themselves within the forbidden degrees—cousins not more than eight times removed—it was hard if it could not be shown, by such witnesses as were used in the Consistorial Court, that one of the two had had intercourse lawfully or sinfully, or was connected spiritually, with a person related within those degrees to the other party. If such proof was not ready, the fickle party had the recourse of suing for a separation on the ground of misconduct subsequent to marriage. The evidence was of the vilest description, and those consistorial judges satisfied themselves with "saving the law," promulgating old brocards of unquestioned principles, and leaving the parties to put in a show of proof that might warrant their application. In their hands the church courts became the common marts for matrimonial jobs. To them appeared the profligate husband—eager to be free to lure some beauty whom he had found he could not buy except by a wedding ring. By their help the courtier, the Angus or Bothwell, threw aside the obstacle that came in the way of an ambitious alliance. But weary wives were as ready in this line as weary husbands. The monstrous state of the law unsexed women; and ladies of good condition, and living in high society, not only sued divorcees against their husbands, but impudently set forth their own guilt and shame as the ground of them.

Mr. Riddell, in a chapter of much curious consistorial learning appended to his latest work on Scotch Peerage Law, has commented in detail upon some of the *causes célèbres* that illustrate the procedure and effects of such suits. This eminent legal antiquary, who knows but too well the secret history of families three centuries ago, says "nothing can be conceived more loose and depraved than the state of society in Scotland before the Reformation;" but he might safely have added, *and for long afterwards*—for reformation of national manners is no sudden thing, and the mischievous machinery of the courts of the old officials was freshly revived in the courts of the venerable "Superintendents" and the more formal judicature of the "Commissaries."

The evil pervaded all classes, but the highest ranks are most prominent in the *records* of shame.

The alliance of James IV. with the daughter of Henry VII. seemed made under the happiest auspices, to give peace and union to the two kingdoms; and so at length it came to pass, but not as men devised. Margaret Tudor was married at thirteen. Her progress into Scotland and her reception by the gay and gallant James had more of chivalrous and romantic splendor than usually attends royal sponsals. While the king lived, though he was not altogether uxorious, Margaret never attracted scandal. She had borne him three sons (two died infants) and was again about to become a mother when widowed by the fatal field of Flodden. She was then not twenty-four. In less than a year after the king's death—in little more than three months after the birth of their son Alexander—she married Angus, a handsome boy. Margaret was fair and buxom, and might almost have been called beautiful if we did not find from even the rude portraits of that age that her countenance was devoid

of delicacy and feminine expression. She was covetous of power and of money, like her brother and her father, and not without talent for business. But—true sister of Henry VIII.—all considerations of policy were thrown to the wind under the influence of passion. She had sacrificed her sway in Scotland, as guardian of her son, to gratify her sudden love for Angus; and when she was tired of him, she threw away the support of England and her brother by her open amour with the Regent John Duke of Albany. It is said they meditated marriage, though Albany, like herself, was already married. But that proceeding was too tedious. Who next occupied her affections after the Regent's estrangement and absence, we do not learn; but in 1524 she became desperately smitten with young Henry Stuart of Avondale, and resolved at all hazards to marry him. Angus for some time opposed her desire for a divorce, but at length yielded, and furnished the requisite evidence of his having "been pre-contracted to a gentlewoman (a daughter of Traquair) who bore a child to him before he married the queen; and so, by reason of the pre-contract, he could not be her lawful husband." The sentence of nullity was pronounced by the Cardinal Bishop of Ancona on the 11th of March, 1527; and we are not surprised to learn that the queen's agents at Rome *pingues expectant propinas, ita quod omnes non possunt contentari cum 600 ducatibus*.<sup>\*</sup> The queen lost no time, and on the 2d day of April she gave her hand to Henry Stuart, afterwards Lord Methven, whom she tired of almost as soon as she had done of Angus. They lived on for some time unhappily enough. Henry VIII. was much scandalized by his sister's licentious use of matrimony! But Margaret had no weak scruples. She determined to be free to marry a fourth time, and for this object had recourse once more to the Church courts. She was able to prove that Methven was cousin, eight degrees removed, to her second husband Angus; and upon the plea that this constituted an affinity between her and Methven, she demanded to have her third marriage set aside. The official, either yielding to the imperious woman, or satisfied of the fact that they were within the forbidden degrees, pronounced a decree annulling that marriage, which is found written and registered in the extant volume of the record of his court. Her son, the young James V., however, stayed its promulgation, and prevented the additional disgrace to his family. Margaret died three years afterwards.

Upon these divorcees Mr. Riddell raises some curious speculation. We find that Angus married again as well as Queen Margaret. It may be convenient to suppose that "the gentlewoman who bore a child" was dead, but that is not known, and is not to be presumed merely from the fact of his new marriage. The same machinery used before might serve him again. He might show that some unsuspected cousinship existed between him and the "gentlewoman," or that he had had at some still earlier date a criminal intercourse with some third party *sib* to "the gentlewoman." Such evidence was to be had for the buying, and then "the pre-contract" *disappeared*.

Granting this solution, (says Mr. Riddell,) in what a strange predicament Angus and the parties would have been, though doubtless not incapable of being rescued from it by the devices and venality of

<sup>\*</sup> Original letter to Albany, in the Archives du Royaume at Paris.

lawyers! His marriage with the queen would then have turned out to be lawful, and after proper procedure still valid and binding—which at the same time—the earl surviving the princess—would have respectively annulled those they latterly contracted. How all classes must have been more or less contaminated by such examples of the upper! But a still more material reflection suggests itself from this and the general unhinged condition of individuals—what a number of bastards there must have been!—*Riddell*, p. 474.

Janet Betoun, the Lady Buccleuch of the Lay of the Last Minstrel, has an unfortunate preëminence in those cases where law was made to pander to passion. She was the eldest daughter of Sir John Betoun, of Creich, a branch of the respectable family of Balfour in Fife, which was brought into more than its due place by having given successive archbishops to St. Andrews and Glasgow. She was first married to Sir James Creighton of Cranstoun-Riddell, and was entered in the dower lands as but recently his widow in 1539. She must have married Simon Preston, the young laird of Craigmillar, soon afterwards, for in 1543 we find her suing a divorce against him in the court of St. Andrews. There was no relationship to vitiate the bond. The lady alleged no misconduct of her husband. As the ground of her suit she blushed not to set forth that before their marriage she had had sinful intercourse with Walter Scott of Buccleuch, and that Buccleuch and Preston were within the prohibited degrees;—*ante pretensum matrimonium inter Jonetam et Simonem contractum, honorabilis vir Walterus Scott de Bulchuyt carnaliter cognovit dictam Jonetam; quiguidem Simon et Walterus in tertio et quarto gradibus consanguinitatis sibi mutuo attinent, et sic prefati Simon et Joneta in eisdem affinitatis gradibus*. On that allegation, and proof of the consanguinity being of course furnished, the official declared the marriage null—*dantes utrique alibi in Domino nubendi facultatem*. The motive of the suit became manifest then, if it were not so before; and on the 2d of December, 1544, Janet was wedded to her old paramour, Buccleuch. She was by no means disgraced or slighted for these incidents of her life, and only suffered scandal from her reputed taste for the black art. She lived respectably with her third husband, a stout and hardy borderer, fit mate for such a partner, till his death in the night foray—

When startled burghers fled afar  
The furies of the Border war;  
When the streets of high Dunedin  
Saw lances gleam and falchions redden,  
And heard the slogan's deadly yell—  
Then the chief of Branksome fell.

After his death (in 1552) the Lady of Branksome, though not, as the Minstrel feigns, the mother of the young chief—who was of a former marriage—was, nevertheless, allowed to rule the household and the estates of Buccleuch, and even rode at the head of “the rough clan.” She was in favor and correspondence too with the Queen Dowager, Mary of Guise. In the mean time she was seeking consolation in her widowhood, and, though not wedded in face of Church, she allowed the privileges of a husband to a dangerous man, who afterwards became too celebrated. She was proved to be “quietly married or handfast” to James Earl of Bothwell in 1559.

When Bothwell's subsequent adventures bring him more prominently on the stage, the dark hero-

ine of Branksome is again somewhat strangely mixed up with his fortunes. He had married, as is well known, the Lady Jean Gordon, in 1565. It would seem the “handfasting” with Dame Janet was not considered an impediment to that match, nor was even worthy to be pleaded when Mary and Bothwell wished to set it aside; for when the grand-daughter of Margaret Tudor had resolved at all hazards to espouse Bothwell herself, other means were sought for removing the obstacle of an existing wife. His countess, certainly collusively, though also perhaps of her own free will, sued a divorce on the ground of his adultery with a servant—and she obtained it “with but small show of resistance.” At the same time, the earl was plaintiff in a similar suit against her; and procured a decree annulling their marriage on the ground of their being *sib* within the fourth degree. The lady's suit was before the new, legal, Commissary Court—the jurisdiction and grounds of action both chosen to please the reformed party; the earl's, founding on the canonical nullity, was in a hastily constituted ecclesiastical court—to suit the views of those of the old faith; and that court did its work expeditiously, for the proceedings commenced on the 5th, and decree of nullity was pronounced on the 7th of May, 1567.\*

At the time of Darnley's murder and the other crowded events of Mary's tragedy, the Lady of Buccleuch—thrice, perhaps four times, a widow—ought to have been well past the turmoils of young blood; yet in the popular belief she was still associated with her former lover, Bothwell. Mr. Riddell says she was charged with administering magic philters to the queen, with a view to secure her majesty's love to him—a very curious termination for a life like Dame Janet's. It is not necessary to maintain of the Lady of Branksome that—

She wrought not by forbidden spell;

but perhaps the learned author has no other authority for the strange tale than one which may bear a different construction—the well-known placard exhibited in the streets of Edinburgh, accusing of Darnley's end, Bothwell, black Mr. John Spens, “who was principal deviser of the murder, and the queene assenting thairto throw the persuasion of the Erle Bothwell and the witchcraft of Lady Buccleuch.” If it were allowed to speculate on such narrow grounds, it would seem more reasonable to attribute the dealings of the lady, the paramour of Bothwell, to jealousy of a formidable rival, than to a wish of securing for him the affection of the young and beautiful queen.

A few other cases will show that the machinery of the Church could be set in motion for others than crowned heads. George, first Earl of Rothes, after

\* Lady Jean Gordon, a daughter of Huntly, and a zealous Romanist, some years after her divorce from Bothwell married the Protestant Earl of Sutherland, and again upon his death Sir Alexander Ogilvie, of the knightly house of Boyne. She had a numerous family by Sutherland, and, notwithstanding her third marriage, and her steadiness to her religion—then out of fashion—continued both to enjoy the dowry of Bothwell, and to manage most vigorously the affairs of the Sutherland earldom, till her death, at the age of eighty-four. A picture of her, at Dunrobin, preserves the high *manly* features of her race and country, and an expression not to be mistaken of resolution and sense. She is dressed in a sort of cowl, with a rosary and cross in her hand. The collar, like a man's shirt-collar of the present day, adds to the masculine character of the portrait.

living for twenty years with his wife, wished to change. But their eldest son was already married to a daughter of the house of St. Clair, and that family was thus concerned for the legitimacy of the Rothés children. The parties went to work in business-like form, named arbiters, and bound themselves to abide by their award. It was settled that Rothés should take a divorce, or rather a declaration of nullity of his marriage, on the ground of his countess and himself being within the forbidden degrees. But, to take off the consequent illegitimacy, he was to depose judicially that he did not know of the *sib-ness* till after the birth of all his children.

Another striking enough case did not come into the Commissary Court till after the Reformation—but the facts had taken place at the period we are considering. Thomas Ogilvie of Craig married Jannet Fraser of Lovat openly in face of the church, and they lived together, and had “diverse bairns.” Then, somewhat tiring of his first wife, he chose to add a second, Beatrix Chisholm. The banns were proclaimed in the parish church of Glenlyon, where Jannet Fraser dwelt, and she offered no opposition—“by manifest collusion.” In this way Ogilvie, who had two mansion-houses on his estate, had also for some time two wives openly entertained by him, the one, Jannet, dwelling in the “Over Craig,” the other, Beatrix, in the “West or Nether Craig.” The suit to put an end to this bigamous display was by the fiscal or public prosecutor, and not raised by either of the ladies. Both must have been quite well aware of the circumstances all along. But it probably now suited both that the first wife should be set wholly aside; and that which they saw their neighbors do under color of law, they chose in the highlands of Perthshire to manage without the expense of the Consistorial Court.

The legitimization of irregular offspring by subsequent marriage of the parents, never very conducive to morality, was set about in Scotland, as in some countries on the continent, with remarkable ceremony. Mr. Riddell quotes a case where parties were married “in the face of holy kirk,” in the chapel of Broomhill, “they holding their natural son, called Claud Hamilton, under *spousal cloth* between them.” This spousal cloth, *pallium*, is explained by Furetière:—

Ce drap qu'on étend sur ceux qui se marient; d'où vient qu'on dit *mettre les enfans sous le Poil*, de la cérémonie qui se fait pour légitimer les enfans naturels par un subséquent mariage en les mettant sous ce Poile.

The custom of the “*cair-cloth*,” or “the cloak,” is still retained for the same purpose among the common people in some districts of Scotland.

We have no room for more of these curious though often revolting cases. Mr. Riddell's book is rich in them, and, forming as it does a very valuable authority for the peerage and consistorial lawyer, deserves also to be carefully perused by every student of history and manners.

Though proceedings in an expensive judicature were necessarily for the most part had by people of some wealth, it would be easy to show that the upper classes had no monopoly of vice. The records of all the Church courts immediately after the Reformation furnish a loathsome picture of the dissoluteness of the lowest. For instance, in articles presented against Adam Bothwell, Bishop

of Orkney, in the General Assembly of 1570, he is charged, among other delicts, “with leaving the flock destitute without a shepherd, whereby not only ignorance is increased, but also most abundantly all vice and horrible crimes are there committed, as the number of six hundred persons convicted of incest, adultery, and fornication, in Zetland, beareth witness.” Far from contradicting that character of the morals of his remote islands, the bishop's reply was limited to denying that he had abandoned absolutely the preaching of the word.

The effect of the Reformation upon the manners of the clergy, whether of the old faith or of the new, was of course signal and immediate. Of its influence upon the people—of the astounding inroad and wide spread of new superstitions—of the slow disappearance of the general immorality which we have faintly described—it is our design to treat in an early number.

Times Correspondent, 12 June.

#### REGULATION OF TRADES IN PRUSSIA.

THE new trade laws, and the restrictions they have introduced as to guilds and occupations, have caused a violent quarrel between the barbers and the wig-makers! The latter claim an exclusive right, according to the statute, to cut the hair of the public; the barbers insist that their profession is not limited to shaving. The arguments on both sides had to be formally heard by the magistracy, whose judicial gravity was severely tried on the occasion. It was solemnly urged on behalf of the barbers that, in the abstract, there is no distinction between the hair of the chin and the hair of the head; the form of the instrument used to remove it did not affect the question; whether the operation was performed by the razor or scissors was a matter of indifference. The office of the barber was to remove superfluous hair, wherever it grew; *ergo*, they had as good a right to clip as to mow. The wig-makers, evading the abstract question of right, represented that the barbers do not confine themselves to clipping, but comb, brush, trim, curl, oil, wash, anoint, and otherwise dress and adorn the heads of their customers, and that these higher branches of the art belonged of right to the wig-makers, who alone can legally create a *chevelure*. The barbers rejoined by an objection, as fatal as that in the celebrated case of *Shylock v. Antonio*, (in Shakspeare's reports.) They contended that the business of the wigmakers only began where that of the barbers ended, when there was no hair left to cut; with perfect baldness the head became the property of the artist in perruques, and at this point the barbers were ready to abandon it, retaining only a right of property in the chin. The magistrates considered the force of the objection, and the barbers have triumphed. The above is only a reproduction of the argument really used before the court which decides such disputes, and they occur daily. It may be said that all the trades of Berlin now sue each other to establish what occupations belong to one guild and what to another. If all the claims were listened to, we should shortly arrive at an Oriental division of employments, and to get one article complete, it would be necessary to go to half a dozen shops for the component parts of it. Fortunately, this splitting up is no longer possible.

From the Edinburgh Review.

1. *Handbuch der Chemie.* Von LEOPOLD GMELIN. Vierte umgearbeitete und vermehrte Auflage. V. Band, 8vo. Heidelberg: 1850.
2. *Handwörterbuch der reinen und angewandten Chemie.* Redigirt von Dr. HERMANN KOLBE. Vierten Bandes, Siebente Lieferung, 8vo. Braunschweig: 1850.
3. *Ausführliches Handbuch der Analytischen Chemie.* Von HEINRICH ROSE. 2 Bänden, 8vo.—Braunschweig: 1851.
4. *Cours de Chimie Générale.* Par J. PELOUZE et E. FREMY. 3 tomes, grand 8vo. Paris: 1850.
5. *Traité de Chimie Organique.* Par JUSTUS LIEBIG. 3 tomes, 8vo. Paris: 1840-1844.
6. *Chemie der Organischen Verbindungen.* Von CARL LÖWIG. Gr. 8vo. Braunschweig: 1850.
7. *Elements of Chemistry, including the Applications of the Science in the Arts.* By T. GRAHAM, F. R. S. L. and E. Second Edition. 8vo. London: 1850.
8. *An Introduction to the Atomic Theory.* By CHARLES DAUBENY, M. D., F. R. S. Oxford, 1850. Post 8vo. pp. 502.
9. *Geschichte der Chemie.* Von Dr. HERMANN KOPP. 4 Bänden, gr. 8vo. Braunschweig: 1843-1847.
10. *Lehrbuch der Pharmaceutischen Technik.* Von Dr. FRIEDRICH MOHR. Gr. 8vo. Braunschweig: 1851.
11. *Handbuch der technischen Chemie.* Von ERNST LUDWIG SCHUBARTH. 3 Bänden, 8vo. Berlin: 1839.
12. *Chemical Technology, or Chemistry applied to the Arts and to Manufactures.* By F. KNAPP. 3 vols. 8vo. 1848-1850.
13. *A Treatise on Poisons.* By ROBERT CHRISTISON, M. D., F. R. S. E. Fourth Edition. 8vo. Edinburgh: 1845.
14. *The Chemistry of Vegetable and Animal Physiology.* By Dr. G. J. MULDER. Translated from the Dutch by Dr. FROMBERG; with an Introduction and Notes, by JAMES F. W. JOHNSTON, F. R. S. 8vo. Edinburgh and London: 1849.
15. *Lehrbuch der Physiologischen Chemie.* Von Prof. Dr. C. G. LEHMANN. Zweiter Band, 8vo. Leipzig: 1850.
16. *Lehrbuch der Chemischen und Physikalischen Geologie.* Von Dr. GUSTAV BISCHOP. Zweiten Bandes, Vierte Abtheilung. 8vo. Bonn: 1850.
17. *Arsberättelser om Framstegen i Physik och Kemi.* Af J. J. BERZELIUS. 27 digra band. Stockholm: 1821 till 1848.
18. *Minné, af J. J. BERZELIUS.* Af M. af PONTIN. Stockholm: 1849.

AMONG the modern sciences which, in their nature and progress, partake most of the character of the advancing material civilization of the nineteenth century, Chemistry holds the first rank. Of that advancing civilization it may even be said to form a main part or element. One of its special duties is to discover hidden and unknown properties and uses in things—to lay open the unsuspected riches of kingdoms. It suggests also, or presides over, all those new and growing arts—not purely mechanical—by which wealth and power are conferred upon the countries that foster them, or by which future dominion and rapid preëminence are promised.

No branch of positive knowledge can boast a history so full of interest and romance as this, or one which presents a more tempting field for literary excursion, either to a writer or to a reader. The more recent progress of the science, however, and its actual position, are our present object; and we must refer those readers who desire to study the history in detail, to the well-known "History of Chemistry," by Dr. Thomson, or to the more elaborate German work of Dr. Kopp, the title of which will be found among the books at the head of the present article.

There are several extemporaneous or off-hand ways, in which the progress of modern chemistry, in extent and importance, may be judged of, by persons who either have never been familiar with its principles, or who have ceased for a time to follow its advance. Among these may be mentioned, as one of the easiest, a brief consideration of the existing literature of the science. Respecting this point, several things are deserving of notice; and first stands the number of new books which are yearly issuing from the press in the various countries of Europe and America, devoted purely to the illustration of its principles. We have quoted the names of only a few of the most recent. The bare titles of the most trustworthy treatises, published even within the last five years, would have filled several pages. In addition to that of Graham, mentioned in our list, we have—all of nearly equal authority—in our own language, those of Thomson, Brande, Turner, Kane, Fownes, and Gregory; while some of the continental tongues are far more rich in systematic chemistry. Meantime, the latest and most complete of these publications on the pure science, exhibit a striking evidence of progress in this particular—whereas, some twenty years ago, three or four octavo volumes, as in the systems of Murray and Thomson, sufficed to contain a full record of all known principles and facts of importance, mixed up at least with their own bulk of theoretical disquisitions and speculations. Six or more octavos, as in the work of Gmelin, now scarcely afford space enough to record the principles and facts alone. Speculations and theoretical disquisitions are far more abundant than ever; but they find their appropriate place in the many periodical journals and in the multiplied transactions of learned bodies which regularly appear in almost every European language.

Again, in relation to the actual extent of the science, and the positive effects produced by its progress, much may be gathered from the size of the body of literature which is now devoted to the explanation of its various *applied* branches. Not only has the range of pure chemistry, as a whole, become so vast that scarcely any one mind can grasp it, or, in a fair measure, master its details; while, by way of simplification, separate divisions have successively been made into mineral and organic, and the latter again into animal and vegetable chemistry; but so many new arts have arisen from the application of its principles to useful and ornamental purposes, and so many new books are devoted to each of these arts exclusively, that a really large body of applied chemical literature has gradually accumulated on the shelves of our libraries. To the present article we have prefixed the titles of only two works—those of Schubart and Knapp—which profess to treat generally of the applications of the science to all the so-called useful arts of life. It would fill a bookseller's catalogue to name only the latest published and best books which re-

late to all the separate or special branches. We possess voluminous treatises, not only on large subjects, such as Medical Chemistry, Pharmaceutical Chemistry, Forensic Chemistry, Agricultural Chemistry, Chemical Geology, Chemical Mineralogy, &c.; but on more limited topics, such as the manufacture of iron, of porcelain, of glass, of soda, soap, vinegar, white lead, the chloride of lime, the sulphates of iron and of copper, the mineral acids, and the thousand other compounds which the chemical arts and chemical pharmacy daily demand, and of which our Great Exhibition while we write is displaying to its millions of visitors such magnificent specimens. The extraction of metals from their ores—the assaying of ores and metals—the special extraction of gold and silver—the arts of enamelling on iron, of gilding and silvering, of photography, of pyrotechny, of bleaching, dyeing, and printing, of malting and distilling, of preserving timber, of making mortars and cements, of obtaining gas from coal and other combustible materials, of preparing mixed metals—and the many other non-mechanical arts, with which a visit to the workshops of our great manufacturing towns would probably make many of our readers for the first time acquainted—all these possess, consult, and are more or less guided by their own chemical books, many of them by periodical journals, written specially to elucidate and explain their own processes.

Then, as a symptom of progress, the rise of the science in general estimation is most significant. It must have been remarked by everybody whose attention has been drawn to the subject, that in our own island chemistry has assumed an entirely new position within the last five-and-twenty years. Five-and-twenty years ago, only three or four men held open schools for teaching its most difficult departments. Scarcely any young persons studied it as a branch of education but such as were destined for the medical profession; and these, for the most part, only very superficially. Now, at least thirty professors, scattered over the island, teach it systematically, and at least as many more instructed chemists obtain a living by superintending or giving advice on its numerous practical applications. And besides medical students, to whom all educated druggists must be added, thousands of other young men are attending annual and systematic courses; while all who study it are both better and deeper taught than formerly, and their knowledge more severely tested in public and private examinations.

It is true that our old universities and the newer colleges, which tread reverently in their footsteps, give as yet but little public instruction in this science, and pay it little honor—counting their non-medical students of it by threes and fives—but the middle classes and the masses extensively learn it in other schools of less pretension both at home and abroad; and it is thus gradually leavening the people. While the old universities have delayed to supply the general wants, or to keep pace with the demands of our progressive material civilization, numerous new colleges and schools have sprung up, partly general and partly special in their objects, to meet the views and wishes of the less stationary part of our population. In most of these new schools chemistry occupies a prominent place as a branch of study; while, both in connexion with them and in many separate localities, laboratories have been erected in which the science is taught experimentally and analytically, and re-

searches are undertaken into previously unexplored departments of nature.

Of the rate at which the science is now making way, a popular notion may be formed from the contents of one of the German books of which we have given the titles. The “*Handwörterbuch der reinen und angewandten Chemie*” is a dictionary of pure and applied chemistry, which began to be issued a few years ago. It has now reached the beginning of the letter K, having completed only ten letters of the alphabet. Nevertheless, to bring up its accumulated arrears, a supplement of 440 pages has been issued, which is now only commencing the letter B. The supplement, in fact, contains nearly as much matter under the letter A as the body of the dictionary itself—so that two works are, in reality, proceeding *pari passu*, the one bringing up the arrears of the other, and promising, when complete, to fill as many volumes. This case illustrates not only the rapid rate at which chemical knowledge is advancing, but the special disadvantages also under which the students and teachers of progressive knowledge labor. The newest text-books are always behind the state of the science. If not already in arrear before they issue from the press, they are always greatly so before an edition of a treatise even of acknowledged merit can be sold off among a limited population like ours. Those who only read or teach from such books must, therefore, be behind also. Hence the necessity of purchasing new works almost monthly, in various tongues—of continued study in order to maintain a familiarity with the *status quo* of the science—of the regular perusal of journals, and of the personal prosecution of laboratory experiment and research.

The progress of chemistry during the present century is characteristically divided into two epochs. During the first thirty years the mineral or inorganic branch of the science received the principal attention of chemists; during the latter twenty, organic chemistry has been gradually attracting to itself the larger number of chemical investigators. It has, in consequence, advanced not only in general estimation, but also in actual extent and in positive importance, in a proportionate degree. In the history of the inorganic period, the names of Davy, Dalton, Wollaston, Prout, Thomson, and Berzelius—all but one now numbered with the dead—occupy a prominent place. But the long career and many labors of Berzelius connect him more than any other of his contemporaries with the successive leading steps in this department from 1800 to 1848. A brief outline of his scientific life, therefore—a somewhat scanty justice having been done him in this country while he lived—besides being otherwise very instructive, will both lighten the graver matter of our pages, and will enable us to present to the reader, in a somewhat connected and more readable form, the main consecutive advances of the science.

In the year 1778, Sweden lost the illustrious Linnæus, but in the August of the year following the loss was replaced by the birth of Berzelius. Early an orphan, he was for some years under the care of a stepfather, a pious Swedish clergyman, with whom “he read a chapter of the Bible every morning, and one of ‘*Sturm’s Reflections*’ every afternoon,” preparatory to his daily walk. In the course of one of these walks, it is related, that, struck with his eagerness in collecting plants, and with the acuteness of his observations, his step-

father remarked, "Jacob, thou hast talent enough to walk in the footsteps either of Linnæus or Cartouche—I hope thou hast God before thy eyes, and so wilt thou do the former." Yet for some time he gave little prospect of the fulfilment of these hopes. Banded about from house to house, and brought up among connections who looked upon him as a burden, his vigor, though unbroken, was long subdued. When his childhood was over, he spent four unprofitable years at the school of Norköping, and quitted it, along with some other young men, for the university of Upsala, in the autumn of 1796. But opposite to his name, in the list forwarded by the rector of the school to the university authorities, were the words "indifferent in behavior and of doubtful hope." He was received, therefore, with reserve, and regarded with suspicion. His first year was passed idly; and his small patrimony—originally 200 rix-dollars (177.) and the ninth part of a small farm—being then exhausted, he engaged himself as tutor to a family in East Gothland. The necessity of teaching made him here somewhat improve himself, till having obtained a stipendium (an exhibition or bursary) he returned to college in 1798. He now underwent what is called the Medico-philosophical Examen; and it is remarkable—considering the eminence he afterwards obtained in this line—that Afzelius, the professor of chemistry, was so dissatisfied with his answers, as to say to his brother professors, "that he would not send the young man back if they were satisfied with him." He was not absolutely turned back, therefore, but his second examination was postponed for a year. It was possibly this partial disgrace, which at length aroused him to exertion; and the objections of Afzelius may have turned his special attention to chemistry. He was nineteen years of age; and he began to frequent the laboratory of the professors then, as now, in the continental universities, open to the students. But his evil name accompanied him thither. On one of his first visits he was encountered by the question, "if he understood the difference between a laboratory and a kitchen?" and, finally, the treatment of Ekeberg, the laborer, drove him from it in disgust. Meanwhile, he studied assiduously at his lodgings, without counsel or advice. War was now raging between phlogiston and oxygen. The teachers adhered to the old faith—the despised pupil took up the new, and succeeded, in his own apartments, in preparing oxygen gas, and showing the combustion of various substances in it to his fellow-students, although in the laboratory, for a whole year, the attempt had been made in vain. In our own days of experimental dexterity, what a picture does this present of the condition of laboratories and of the skill of laborers in the year 1800! And how much does the following incident teach us!

One afternoon, on entering the laboratory, a glass retort caught his eye, which the professor had unwillingly taken from his closet in the morning, for some necessary experiment, with many injunctions to carefulness and a safe return. For a glass retort Berzelius had long been wishing, with a view to an experiment he desired to perform at home. Snatching at the unexpected good luck, with an absence of scruple such as keen collectors often display, he carried home the prize, and there, in the silence and solitude of night, observed the phenomenon he longed to see, and by which he was led to his first chemical discovery. The searching spirit which many years before had struck his

step-father in the child, had begun again to animate the young man. With the stolen retort he not only increased his own knowledge, but added also to that of mankind at large. Though as yet scarcely looked upon as a student, he was already on the highway of discovery; and though years of difficulty and struggle afterwards beset the man, this keen spirit never once forsook him—it increased only in energy as the obstacles with which he had to contend. The summer of 1799 was spent by him in an apothecary's shop in Wadstena, where, from an Italian, he learned the art of working in glass; his after dexterity in an art now so indispensable in the laboratory, will be long remembered by all his pupils. Having passed the winter in Upsala, he was employed during the ensuing summer as assistant to a physician at the mineral waters of Medevi. These waters he analyzed, and made them the subject of his thesis at his second examen, in December, 1800. But, now again, Afzelius opposed him at his examination. He had no confidence, he said, in the analyses of the young man; and, finally, he recommended him "to go to the university of Lund, where he might possibly have better luck." The difficulties, however, were at last got over, and he was allowed to pass. Meanwhile he had made researches on the production of nitric ether, on the properties of nitrous oxide, and other subjects then little understood. These he placed in the hands of Afzelius, by whom they were sent to the Academy of Sciences at Stockholm. After three years the secretary of that learned body returned them with the brief remark, "that they did not acknowledge the new nomenclature!"

Here, then, we seem to stand on the very threshold of modern chemistry. Phlogiston was not yet abandoned by that very scientific Academy, which at a subsequent period, for nearly thirty years, led the van in chemical views and nomenclature.

The discovery of Volta, in 1800, had excited Berzelius to make experiments with the new pile on the human body; these formed the subject of his dissertation at his licentiate's examen in 1802. The following year he settled in Stockholm, and was appointed Adjunct Professor of Medicine and Pharmacy in the College of Medicine. In 1804 he took his doctor's degree, eight years after leaving Norköping; but it was not till 1807 that he was appointed actual professor in the School of Medicine of Stockholm, an office which he held for nearly forty years. Still the Academy—whose proceedings he afterwards directed for so many years—refused to publish his papers; less generous minds could see no genius in one whom an unfavorable reputation had followed from school and from university. He associated himself, therefore, with his friend Hisinger in the publication of the "*Afhandlingar i fysik, Kemi och Mineralogie*," which subsequently attained so much celebrity. His perseverance finally triumphed. In 1808 he was elected a member of the Academy; in 1810 acted as its president; in 1813 a yearly pension was assigned him, as had formerly been done to Scheele, on condition "that he should communicate to the Academy the researches they had formerly despised;" and, finally, in 1818, during his absence in Paris, he was elected perpetual secretary. This appointment placed him at the head of the science of his native country; and the pecuniary and other difficulties under which he had hitherto labored were, at the same time, in a great measure removed.

The early life of Berzelius was thus a constant struggle with poverty, with unkindness, and with many difficulties, which had originated in an idle, listless, and unconciliatory disposition, itself the fruit of a depressed and half-broken spirit. How different the opinion formed of him by his teachers from that which his pupils and friends universally entertained in after life! The mental discipline he underwent at college probably, however, improved him as a man; and, had he not thus been almost forced into the study of experimental science, to which his mind seemed early and naturally predisposed, he might have passed a life of little comfort to himself, and of no value to his country.

It is from 1803 that the researches of the Swedish chemist link themselves with all the main steps in the progress of the chemistry of the present century. The era of modern chemistry may be said to have dawned when the oxygen of Lavoisier began to get the better of the phlogiston of Stahl, and the balance to be recognized as an indispensable instrument of research. It fairly commenced when the discoveries of Volta and Galvani not only made men acquainted with a new power which evidently influenced the chemical relations of bodies, but put in the hands of the experimenter a new and most effective instrument of investigation. In the successful hands of Davy this instrument soon after led to the most felicitous results. In 1803 Berzelius published a paper on the decomposition of saline compounds by galvanism; five years later Davy, by the same agent decomposed the alkalies; and, while the world was ringing with this latter discovery, "I succeeded," says the Swedish philosopher, "in going a step further; and, by the aid of quicksilver, decomposed the alkaline earths and ammonia, of which I informed Davy, who acknowledged, in his reply, that this reduction was previously unknown to him." Thus within twenty years were two revolutions made in chemical knowledge and theory, and each by the use of a new tool. The balance established the views of Lavoisier, the galvanic battery wrought the discoveries of Davy.

These discoveries were the foundation of the Electro-Chemical theory, and became intimately connected also with what is called the Atomic theory, or the doctrine of definite, equivalent, and multiple proportions. The study of the mutual and relative influences and reactions of atoms or molecules, insensible in size, and acting at insensible distances—of the laws by which these are regulated or determined—of the sensible effects which accompany, or follow, from the mutual combinations and disjunctions of these molecules—and of the modifications which circumstances or agents, under or beyond our control, impose upon the manifestation of these laws, and upon their results; forms, in reality, a large part of the whole field of chemical inquiry. Its deepest doctrines and researches are entirely molecular, and the pure science has become a refined department of physics. The foundation of the Atomic theory was laid by the researches of Wenzel and Richter, in Germany; but this theory was first made the basis of Chemical Philosophy by our English Dalton. To the latter, and to Dr. Prout, as speculative philosopher, it owes much; and very much, also, to the experimental researches of Wollaston and Thomson. But the analytical labors of Berzelius, which were devoted for so many years to the determination of what are called Atomic weights or combining proportionals, and the investigations of Gay Lussac on

the combining volumes of gases and vapors, contributed more to the rational establishment of this new system than those of any other individual chemists. Many cooperated, however, in different degrees; and a valuable sketch of its progress, and of the shares of the several fellow-laborers, will be found in an able treatise "On the Atomic Theory," by Dr. Daubeny, of which a second edition has recently appeared from the Oxford press.

The multiplied analytical researches of Berzelius may be said to have given rise, also, to the now most recondite and difficult department of analytical chemistry. The knowledge bearing upon the inorganic—so refined and abstruse a portion of this department—has been extended and enlarged by several of his pupils, and especially by Professor Heinrich Rose, of Berlin. It might have been supposed to have been digested and matured in the "Ausführliches Handbuch der Analytischen Chemie" of this distinguished analyst. For Professor Rose's "Manual" is a book of 2000 octavo pages; and yet, like nearly all our chemical books, it was already behind the time before the last sheet issued from the press.

These analyses led successively to the discovery in Sweden, and elsewhere, of many new elementary bodies. By a simple or elementary body chemists mean one which is incapable by any known methods of being resolved into two or more other bodies differing from itself. Compound bodies again consist of, and can by known means be resolved into, two or more elements regarded as simple. Of such elementary bodies only twenty-nine were known at the beginning of the present century; we are now acquainted with sixty-three. This fact will illustrate to the general reader one great feature in the progress of modern chemistry. But to the chemist the discovery of thirty-four new elementary bodies implies an amount of painful research—preceding and following each discovery—of which words can convey to the uninitiated no adequate idea.

It is not merely that the satisfactory isolation of a new element is itself a work of long and discriminating labor, or that it imposes almost endless after-inquiries concerning its relations and combinations with other bodies; but such a discovery casts a doubt upon all past analyses of a particular class, and renders imperative a repetition of many most serious investigations. The way in which each analytical discovery thus throws us back, as it were, will appear by a simple illustration. It was early discovered that the mineral matter of plants contained silica—the substance of flint—in considerable quantity. Yet this substance was supposed to form no part of the bodies of animals, and to be a characteristic feature of the vegetable kingdom, till an analysis of the feathers of birds proved that they too contained silica in a very sensible proportion. It was sought for, therefore, in the natural covering—the hair of animals and man; and new analyses proved it to be present there also. But if in the hair it must be in the blood, from which all the parts of the body are formed and draw their constant support. Renewed examinations of the blood, accordingly, discovered it there, and thus new light was thrown upon animal physiology, and upon the natural relations between plants and animals.

So also in nearly all our analyses of the ashes of plants and of the parts of animals, common salt had been found in comparatively small proportion. But recent research, conducted after improved methods,

has shown that some at least of these ashes contain this substance in much larger proportion than was previously believed; they, therefore, suggest the necessity of repeating all our experiments in this field before the true composition of the inorganic part of living beings can be said to be ascertained. Iodine, in like manner, early found in marine plants, has recently been detected in the common cress, and in many other plants which grow in fresh water. Must we not expect to find it in all plants? Is its presence not necessary to the healthy sustenance of animals? Fluorine exists in seawater and in marine plants. But it exists also in the bones and teeth of all animals, in milk and in blood. It must, therefore, be present in all vegetable food, and must be necessary to the healthy growth both of plants and animals. In the past analyses, however, of the mineral matter of the plants on which we live, it has neither been sought for nor detected. The same imperfect process of preparing the ash of plants and animals, which has caused a portion of the common salt to disappear, has probably also lessened the true amount both of iodine and of fluorine in the specimens hitherto analyzed. Even bromine may possibly not be absent from plants and animals, if carefully sought for. Those who are aware of the amount of analytical labor which during the last ten years has been expended upon this branch of analysis, chiefly for the benefit of agriculture and physiology, will be able to estimate the nature of the task which awaits the chemist, by whom it must all be repeated. In this way new discoveries in chemistry are continually harking us back. Old analyses in the inorganic kingdom, though useful to a certain extent, all become from time to time untrustworthy, and the labors of years must be gone over again. But this is only the periodical retiring of the monthly wave, which at the next spring-tide may assert a wider and more secure dominion than it ever possessed before.

It is in connexion with mineralogy that the inorganic chemistry of our time finds one of its most indisputable triumphs, the atomic theory one of its most interesting applications, and chemical analysis the field of its most arduous and constantly renewing tasks. Born in a country rich in minerals, and abounding in mineral wealth, Berzelius and most of his chemical pupils and successors in Sweden have dedicated much of their attention to the productions of the mineral kingdom. Before him Klaproth and others had analyzed many of these substances, without knowing or even thinking of any general principle, by which either the results of their analyses might be tested, or the minerals themselves classified and arranged.

It was after his visit to England in 1812 that Berzelius threw into a methodical form the results of his numerous mineral analyses, and applied to them the new views in respect to the electro-chemical relations of bodies, and the proportions in which they combine with each other. In 1814 the Swedish edition of his "Application of Chemical Proportions to Mineralogy" was published. Within a few years it was known and reprinted in most European languages. Its illustrations were subsequently from time to time augmented, and the principles on which it was based more firmly fixed, by numerous fresh analyses executed by himself and others. The most complete form in which his latest views have yet appeared is in the "Berzelius' Neues Chemisches Mineral System" of Professor Rammelsberg of Berlin, published in

1847; while the book which at present most fully represents the actual condition of chemical mineralogy is the "Handwörterbuch der Chemischen Theils der Mineralogie" of the same author, with its four several supplements.\*

To those who are capable of contrasting the old mineralogy with the new, the happy conclusions, which the numerous analytical labors of Berzelius and his pupils have successively attained in this branch of science, appear very striking. What was formerly an undigested collection of rude stones brought together according to no natural law, and arranged only according to weight, color, hardness, or form, more or less imperfectly determined, analytical chemistry has classified in families and groups, beautifully scientific, and characterized by singular analogies in form and composition. It has established close relations among individuals and classes, such as could not previously be even suspected to exist. It has afforded to the philosophical generalizer the means of testing the correctness of analyses, of determining what is essential or otherwise to the composition of a mineral, and of thus assigning to it its proper place in his groups and system. And, reacting, as all such special investigations do, upon pure chemistry, the development of this branch—uniting in itself the joint investigation of composition and of crystalline form—has made known the existence of analogies and relations among long familiar elementary bodies, of which the study of merely artificial combinations had previously given us no intimation. It has been recognized, in short, that the interior of the earth is nature's laboratory, in which she is continually carrying on an endless variety of chemical operations, the results of which, like those which are obtained in our own laboratories, belong altogether to the domain, and are subjected to the recognized laws, of chemical science. Mineralogy, in so far as it is not purely physical, is, in fact, only a subordinate branch of inorganic chemistry. Pure minerals must be arranged, like all other pure chemical combinations, and like them are capable of being represented by definite literal formulæ.

No one who has not himself been for some time occupied with mineral analyses can have any idea of the world of time and labor which has been spent in the analytical investigation of mineral compounds. Among the thousands of specimens which adorn our cabinets, one beautiful group, long distinguished by the name of zeolites—hydrated silicates of alumina, with lime, potash, and soda, chemists now call them—is well known to mineralogists. The drawers now before us contain about fifty species belonging to this group. We take up at random a specimen of Laumontite, named from its discoverer, Gillet de Laumont. This mineral has been analyzed successively by Vogel, Gmelin, Dufrenoy, Connel, Von Babo, Delfs, Domeyko, Malaguti, and Durocher. Nine analytical chemists have each, at successive periods, with a knowledge of the labors of their predecessors, devoted some weeks to the examination of this one stone; and yet its chemical formula and most natural relations are still open to question. On a moderate calculation an amount of chemical activity equal to that of four long and laborious analytical lives, has been

\* This work presents another instance of the rapidity of chemical progress. It was published in Berlin in 1841, and contains 768 pages. The last of the four supplements appeared in 1849, and they contain in all 762 pages. The new matter of the last eight years is equal in bulk to all that was known before!

expended in elucidating the composition of these zeolitic minerals alone. How long must it be before a reasonable man can expect chemical mineralogy to arrive at its final settlement!

Our space admits only of an allusion to the beautiful researches into the relation of chemical composition to crystalline form in natural and artificial compounds, which have given Mitscherlich a distinguished place in the conjoined history of chemistry and mineralogy. Isomorphism, Dimorphism, Isodimorphism, and the doctrine of Replacement, are all subjects suggestive to any one well read in the history of chemical progress, of many successive labors; of memoirs and experiments full of beauty; and of numerous partial but gradually widening generalizations. But in this branch, as in the direct analyses of our zeolitic minerals, a single page of a "systematic treatise" comprehends often the results of whole lives of thought and toil. The young student, as he masters the page before him, acquires the knowledge of gray-haired philosophers in the maturity of their fame and fortune. Yet he can never look upon his learning with the interest which those men feel who are familiar with the difficult passages and hard struggles through which the fame has been achieved, or the knowledge arrived at, which the page embodies.

Before quitting this topic, however, we must spare a few words for that subtle, almost microscopic, branch of qualitative analysis, where the blowpipe is made an instrument of research in mineralogy and inorganic chemistry. To Berzelius the world owes the first treatise which brought the blowpipe into general use among chemists. His volume "On the use of the Blowpipe in Chemistry and Mineralogy,"\* appeared in Swedish in 1820, and contained the results of many years' experience of his own, added to the earlier knowledge he had acquired from the personal instructions of Gahn. Among the men of whom Berzelius always retained an affectionate and grateful remembrance, was Assessor Gottlieb Gahn. Already advanced in years, but full of the mineralogical knowledge of his time, and skilled above every other Swede in the employment of the blowpipe in chemical inquiry, he encouraged by his kindly notice and sympathy the rising chemist, while still struggling with early difficulties. He communicated to him, also, all the practical skill which the Swedish assayers, from before the time when Stahl used the blowpipe in 1700, had been gradually accumulating, and of which Bergam, with the assistance of Gahn, then his pupil, had already published a synopsis in the second volume of his "Chemical Essays."† The filial spirit of a grateful scholar appeared in what we have heard Berzelius say, long after Gahn's death, about his own book on the blowpipe; "Most of what I have recorded there I learned from Gahn; I have only put it into my own words." Of late years this branch of inquiry has also received great extension; and the work of Plattner, ("Die Probirkunst mit dem Löthrohr,") which has been done into English by Dr. Muspratt, is now a standard authority.

Within the domain of inorganic chemistry yet another field of vast extent is now undergoing the operation of clearing. To speak in the language

of a North American settler, the trees are partially cut down; a few have already been burned; the first seed has been sown upon the spread ashes; and the green blade is beginning to cover with verdure the primal soil. To Geology, the twin sister of Mineralogy, but of wider grasp by far and of loftier mind, Chemistry has for many years been offering her occasional aid. But the rough blockers-out of the young science were not prepared by their knowledge or pursuits to appreciate the nature and causes of by far the largest class of manifold phenomena which the crust of our earth exhibits.

The daring mind of Davy made the first bold application of chemical knowledge to the explanation of the most impressive physico-geological phenomena which the surface of the globe now exhibits. The metal potassium, one of his great discoveries, takes fire on contact with cold water, produces much heat, and liberates a large volume of elastic (hydrogen) gas. This property of his new metal carried the philosopher's mind at once to the burning volcano and the shattering earthquake. "Give me," he said, "accumulations of potassium or sodium, or other analogous metals in the bowels of the earth, and let the waters of the sea descend to them, and all the phenomena of the volcano and of the earthquake may be produced." There is no impossibility—scarcely an improbability, as he afterwards believed—that masses of these metals should here and there exist in the interior of the earth. And it was to him an interesting fact, that nearly all the active volcanoes then known were situated near the sea; from which, therefore, water might readily descend to such accumulations of his combustible metals. "They are the cause of earthquakes and volcanoes," was the conclusion, therefore, of his rapid and ardent mind; and thus he became the author and propounder of what was called the "Chemical Theory of Volcanoes." This theory, possessing both simplicity and beauty, was readily adopted by numerous philosophers. And, although the progress of knowledge has now greatly lessened the degree of special favor with which it used to be regarded even by inquirers after truth, yet many of Davy's old disciples still cling to it as the true doctrine of nature, and refuse materially to modify their early faith. Among English authors, this view is still upheld in the work of Dr. Daubeny\*—on other accounts a very valuable book; while a partial collection, especially of the physical facts, which are to aid future chemico-geologists in arriving at a general theory of both earthquakes and volcanoes, has been admirably commenced by Mr. Mallet of Dublin,† under the auspices, and in the published transactions, of the British Association for the Advancement of Science.

But from every field or section of geological investigation, numerous chemical questions spring up. With igneous rocks, whether more ancient or more modern—with the so-called metamorphic or altered rocks, the origin, original nature and changes of each, and with the origin and relations of the numerous mineral substances they respectively contain—countless inquiries are connected which this science is called upon to answer. The slow changes to which deposits of gypsum, of rock salt, of natron, and of nitrate of soda are due, demand for their elucidation profound chemical study. Coal and the combustible minerals, the

\* Om Bläsörrets Användande i Kemien och Mineralogien. Stockholm, 1820. It was translated into German, French, English, Italian, and Russian.

† The English Translation of this work was published in London; the first and second volumes in 1783, and the third in 1791.

\* Description of Active and Extinct Volcanoes. Second Edition, 8vo. London: 1848.

† First Report on the Facts of Earthquake Phenomena. By Robert Mallet, M. R. I. A. London: 1860.

mysterious amber and the precious diamond—their origin, the successive changes through which their first material passed before it assumed its final form, and what were the special circumstances by which these changes were induced, promoted, retarded, or arrested—veins filled with metalliferous minerals, or with sparry contents of various kinds; stratified deposits and veins of phosphate of lime; mineral waters—the nature, source, and constancy of their impregnations; pure water and steam—their agency under ordinary and extraordinary temperatures and pressures, in altering rocks and producing specific mineral combinations; the atmosphere—its past and present constitution and history, its influence on the materials which form the earth's crust, and their influence again in modifying its composition; the changes which the remains of organized beings buried in the strata induce, or have themselves undergone during the prolonged action of natural causes—these make, severally, almost unlimited demands on the patience and sagacity of chemists, which the labors of many coming years will be unable fully to satisfy. Chemical geology will by and by be recognized as a department of geological science at least as distinct and valuable as the hitherto more popular and more generally interesting branch of Paleontology; and as demanding a special knowledge in its cultivators at least equally extensive and profound. It will continue also to grow in interest and freshness long after the early zeal in behalf of mere descriptive geology and the geography of rocks has died away. Since the time of Davy, numerous, though less ambitious, contributions to chemical geology have been made by Berzelius, Bonsdorff, Mitscherlich, Blum, Delesse, Deville, Ebelmen, and other chemical analysts and observers. Among the latter, Professor Bischoff of Bonn has of late years taken a prominent place. And he is at present rendering an important service to this branch of the science, by embodying, along with his own peculiar views and private experiments, a learned critique upon nearly all that has been done by others in a voluminous work—"Lehrbuch der Chemischen und Physicalischen Geologie"—now issuing from the press, and of which the concluding part is promised during the present year.

Lying between the two great divisions of mineral and organic chemistry, and belonging almost equally to both are the interesting subjects of Allotropy, Isomerism, Polymerism, Catalysis, and some others, to which recent investigations have called the attention of philosophical chemists, and which tend daily to connect the familiar and sensible phenomena of the science with the most recon-  
 siderate considerations of molecular philosophy. But over these topics we most unwillingly pass, that we may devote a larger space to the already wide and rapidly growing department of organic chemistry.

That this department *should* be large, will be admitted by the reader when he learns that it embraces the study of every part of everything which lives or which has lived, and of countless compound bodies which are formed during the decay or artificial decomposition of the several parts of living things, animal or vegetable. Not only are the parts and products of each plant and animal very numerous, as well as the successive changes they undergo in the successive stages of their growth, and during various forms of disease, but each of the many thousands of living species in both kingdoms

produces or contains something peculiar to itself, which chemistry must examine. Can any limit be assigned to a field so wide as this? During late years, the name of Liebig has been most prominently connected with the progress of organic chemistry. As, however, his career did not begin till the foundations of this line of inquiry had been already laid, we must commence our sketch at an earlier period.

The Alchemists had done little here. *Their* experimental trials were made for the most part upon mineral substances, although, after the process of distillation came to be perfected, alcohol and some ethereal oils were discovered by them; succinic acid was obtained from amber; benzoic acid from gum benzoïn; and vinegar and wood spirit from the dry distillation of wood. But it was not till towards the close of the phlogistic period that organic chemistry, in the hands of Bergman and Scheele, began to make any decided progress; nor till a still later period that it first received from Lavoisier a decidedly scientific character. Lavoisier applied to organic compounds the same method of interrogation by which he had effected his great reforms in inorganic chemistry. Of what elementary bodies does this organic compound consist?—of carbon, hydrogen, and oxygen, experiment answered. Then in what proportions by weight do they severally exist in it? Thus the use of the balance and the accuracy of numbers found their way also into this department of the science.

Two things now became necessary to future progress—to devise a set of methods by which organic compounds might be obtained in a pure state, possessing constant properties and composition; and a second set, by which their elementary constituents might be separated from each other, so completely and in such a form as to admit of being respectively weighed and measured with the necessary degree of accuracy. The latter of these objects was only imperfectly attained by Lavoisier himself, and subsequently by Fourcroy, Vauquelin, (1802,) and de Saussure, (1807.) It was more completely arrived at through the processes introduced by Gay Lussac and Thenard, (1810,) and those recommended by Dr. Prout, and was virtually perfected through those employed by Berzelius in the analyses which he published in 1814. It is an important point in the history of analytical chemistry, to remark that, to the methods adopted in the year 1815, scarcely anything has since been added by which greater accuracy can be secured. The introduction of Liebig's beautiful tube, and the successive valuable suggestions and processes of Dumas and others, have greatly simplified, and rendered more generally attainable, the rapid and facile performance of organic analyses; but they have added little to the accuracy of the results which a careful analyst could already arrive at by the methods of 1815. Of this truth we present the following illustration.

Among the substances of which Berzelius had published analyses in 1814, were benzoic acid and benzoate of lead. It was our good fortune, subsequently, to be his guest in Stockholm in 1832, when he received from Liebig, by letter, an account of the most interesting researches of himself and Wöhler, into the nature of the oil of bitter almonds, and its kindred compounds. In this letter a doubt was expressed respecting the true formula for benzoic acid as deduced from the analyses published by Berzelius in 1814. We had, in consequence, the pleasure of witnessing a re-preparation, with his

own hands, of the benzoate of lead, and a reanalysis of the acid it contained. The percentage results of these new trials were found, on turning back to the old note-book, to agree to the third place of decimals, with the numbers obtained for the composition of benzoic acid, twenty years before! The reader will not wonder that such a circumstance should have inspired us with great faith in the precision of the early as well as later methods and researches of this distinguished chemist.

Among the successive steps of more or less importance, in the progress which this branch of the science began to make, after accurate methods of analysis had been discovered, that of Chevreul proved particularly effective. In his great work upon the fats,\* he showed the use of studying and analyzing, not only the natural substances or compounds themselves, but the chemical changes also which they may undergo; and the new products and compounds they can be made to yield. And further, by comparing the composition as well of these products as of their combinations with other substances, with that of the natural bodies from which they were derived, he illustrated how one analysis might be made to control and test the accuracy of another; how, in this manner, most interesting views might be arrived at, in regard to the molecular constitution of organic compounds, and how what had been hitherto very obscure chemical changes might be lucidly explained. From him, therefore, must be dated the first outline of a true analytical investigation of an organic compound.

The subsequent pursuit of this method of inquiry brought into more general use the habit of representing by formulæ what is called the *rational* constitution of a body. The results of analysis show the numerical proportions in which the several elementary bodies or their equivalents exist in the compounds examined, and enable chemists to represent their composition by formulæ, which are absolutely true as expressions of these results. In the simple case of oxalic acid, for example, analysis shows with certainty that its two constituents, carbon and oxygen, are present in it, in the proportion of two equivalents of the former ( $C_2$ ) to three of the latter ( $O_3$ ), and that it may, therefore, be truly represented by  $C_2 O_3$ . But whether the three molecules or atoms of oxygen are united directly with the two of carbon, as may be represented by  $(2 C + 3 O)$ ; or whether they are so arranged that two of carbon being united to two of oxygen ( $C_2 O_2$ ), this compound is united again with the third atom of oxygen as in  $(C_2 O_2 + O)$ ; or whether two of a compound  $C O$  are united with this third of oxygen, as in  $(2 C O + O)$ ; or whether, finally, the well known gas, carbonic acid  $C O_2$ , unites directly with the equally well known carbonic oxide  $C O$ , so as to form oxalic acid, then truly represented by  $(C O_2 + C O)$ —these molecular or theoretical questions are not at all touched upon by the *empirical* formula  $C_2 O_3$ , though that formula is absolutely true as a representation of the relative proportions, determined by accurate analyses, in which its constituents exist in oxalic acid.

The principle involved in the above illustration has, ever since 1814, occupied more or less of the attention of organic chemists. It has given occasion, at different periods, to violent controversies, often foolishly warm, and in the conduct of which a philosophical zeal for the truth has occasionally

been overborne by individual feelings, and even by the spirit of national rivalry. But, although very different theoretical views have been successively taken, as knowledge advanced, by different chemists, in regard to the rational composition of sundry organic compounds, yet these very differences have promoted, in almost every instance, the advancement of the science. They have each suggested additional inquiries, and indicated the necessity of new and special analytical investigations; so that rational formulæ, embodying, as they often do, most valuable hypotheses or conjectures, have in reality become an element of further progress. And now it is regarded as a requisite, very desirable if not indispensable, in the formulæ for organic substances, that they should express, not only the relative proportions of the elements of which the substances consist, but a probable grouping of the molecules also, by which their relations to other substances of analogous composition, and their principal chemical reactions may be suggested or explained. In more Southern Europe, Dumas, Boullay, Laurent, and Gerhardt have been most conspicuous in this division of chemical labor.

In 1814, Berzelius, in his published analyses, showed that the doctrine of chemical equivalents was applicable to organic as well as to inorganic compounds; and thus by the aid of symbols, in which each elementary substance was represented by the initial letter of its Latin name, he was enabled to construct formulæ, by which, as we have said, their composition, as determined by analyses, could be truly represented. But his view then was, and many followed him in adopting it, that in organic substances consisting of three elements—carbon, hydrogen, and oxygen—the constituents were united with each other directly into *ternary* combinations, such as may be understood by placing the molecules in this manner,  $\overset{C}{H O}$ , instead of being first united by twos, as would be represented by such formulæ as  $CH + O$  or  $C + HO$ . In this ternary mode of union he recognized also a clear and satisfactory distinction between organic compounds, and those of the inorganic kingdom, in which only binary combinations had hitherto been recognized. Already, however, in 1819, when he published the great contribution to scientific mineralogy, of which we have already spoken, Berzelius intimated his belief that the electro-chemical theory was also capable of best explaining all the phenomena exhibited by organic bodies. This involved the opinion that organic compounds were all binary, and he now began to represent the organic acids as oxides of what are now well known in chemistry by the name of compound radicals.

These so-called radicals of Berzelius were for the most part hypothetical, only supposed or assumed to exist. It was to the brilliant researches of Gay Lussac, that we owed our first acquaintance with a compound body which exhibited all the chemical relations hitherto supposed to be characteristic of the elementary substances. His discovery of cyanogen—a compound of nitrogen and carbon, which behaved in every respect towards the elementary bodies as chlorine and iodine do—at once astonished and enlightened the chemists of the time, (1815,) and was doubtless the germ of the new views soon after adopted by Berzelius (1819) and others, in reference to organic combinations. This was probably hastened also by the idea thrown out by Ampère, in 1816, that, as the compound cyanogen was analogous to the electro-negative elements, chlorine,

\* *Recherches Chimiques sur les Corps gras d'Origine Animale.* Par M. E. Chevreul. Paris: 1823.

iodine, &c., so the hypothetical compound *ammonium*, consisting of nitrogen and hydrogen ( $NH_4$ ), resembled in all its chemical relations the large family of metals, or electro-positive elementary bodies. But cyanogen and the supposed ammonium contained *two* elementary bodies only; and although much progress was made in rational organic chemistry by the aid of these additions to our knowledge, yet much darkness and doubt existed still. In decomposing organic substances, it had often been remarked that certain elements or certain proportions of their constituent elements, were separated from a compound more easily than others, and thus appeared to be held by a less powerful affinity, or to form less necessary portions of the molecular arrangement as a whole. Did the more firmly united molecules—often containing three elements—constitute a central radical, round which the others were grouped more loosely, from which the latter might be removed without breaking up the central arrangement, or with which, instead of the latter, other elements might be combined, without altogether taking away the characteristic properties of the compound into which they were introduced? Experience could not answer this question.

Years of active thought and research scarcely yet appeared to justify the supposition that radicals containing three elements really did exist. It was pushing theory much too far a-head of experiment—leaping too far into the unknown—to admit that radicals might exist of which oxygen, united to hydrogen and carbon, formed a part, and which should yet appear, in their relations to chlorine, and the other elementary bodies, as if they were themselves simple and uncompounded. But the dawn of a new day had come, and a gleam of fresh light was thrown upon rational organic chemistry, when, in 1832, a memoir on the composition and properties of benzoyl appeared, the joint production of Liebig and Wöhler. We can well recollect the surprise and pleasure expressed to ourselves by Berzelius on the perusal of the first account of their experiments; and every one at all acquainted with the later history of this branch of the science, must be aware how much the results of these experiments have contributed to promote its rapid advancement. Since that period, indeed, Liebig has been gradually acquiring in Northern Europe, in reference to organic chemistry, a position approaching to that so long occupied by Berzelius, in reference to the science as a whole. But the growing vastness of chemical knowledge forbids the idea of any second Berzelius ever appearing.\*

\* This difficulty of now mastering the science as he had been able to do, is put forward by Berzelius, in his *Ärsherättelse* as far back as 1838—of course with a very different view from ours. "The period of my life," he says, "has been peculiarly favorable for the study of that science to which I have felt a natural inclination, and a similar one can never return. At the beginning of my scientific studies, new-born chemistry had scarcely left its cradle. The measure of existing knowledge did not exceed the capacity of youth to bear in mind. The whole was soon made familiar, though year by year it has been developed, and the measure of knowledge gradually increased. After forty years of progress, a mass of materials lies before the beginner of which it is impossible for him to make more than a part his own, within the period assigned to ordinary studies, and perhaps more than any one can ever altogether master, although it has not been difficult to become gradually possessed of all during a continued study of forty years." Thirteen years of most rapid advance have elapsed since this was written—how much more arduous, then, must the task be now!

distinguished at once by special contributions to every branch, and by an intimate acquaintance, practical and theoretical, with the entire range of chemistry, mineral and organic. Future great chemists must be content to bear rule each in his own particular walk only.

It would weary our readers were we to indulge in further detail regarding the progress of organic chemistry in its pure state. That the so-called rational views on the composition of organic bodies have undergone serious alterations at brief intervals of time, and as knowledge widened, is a proof that our progress has been rapid. And again, the extent to which such changes have really taken place, is popularly shown by the successive new names which have in consequence been imposed on the same substance, and the burdensome synonymy which has thus been introduced into the science. We open at random a volume of the German Dictionary of Chemistry, to which we have already referred, and the following synonymy appears at the head of the first paragraph which catches our eye—"Hydrochlorate of Chloride of Vinyl—Chloride of Elayl (Berzelius)—Hydrochlorate of Chloride of Acetyl (Liebig)—Chloride of Etherin (Mitscherlich)—Hydrochlorate of Chloride of Aldehydene (Regnault)—Chloride of Hydrocarbon—Chloric Ether—Oil of Olefant Gas—Oil of the Dutch Chemists—Dutch Liquid." Ten ponderous names for a useless oily liquid, discovered by some Dutch chemists in 1795, and which is produced when olefant gas and chlorine gas are mixed together! Probably as many more may be given to it, before either its name is finally fixed, or its nature and rational formula truly determined. As marks of progress, real or imaginary, such a series of landmarks may be very interesting; but what human memory can hope to retain them all! With the view of simplifying, harmonizing, and rendering uniform the entire nomenclature of this organic department, Leopold Gmelin, in the fourth and fifth volumes of his most learned and most valuable "*Handbuch der Chemie*," has boldly coined an entirely new system of names which are intended to supersede all that had gone before. Regnault also, in the fourth volume of his excellent "*Cours Élémentaire de Chimie*," has introduced some beautiful theoretical simplifications into the nomenclature of certain classes of bodies which had been suggested by Dumas and others. Both attempts are entitled to great credit, more especially the laboriously developed and long digested scheme of Gmelin. His new names have the advantage of being intelligible through the synonyms that accompany them, which is not the case with those of Regnault. But the period has not yet arrived for fixing this nomenclature; and, in both cases, we fear that the premature attempt will have only ended generally in new additions to the uncouth crowd of names by which the members of this class of bodies were previously known.

Among the most recent advances which have been made since the general reception of the doctrine of organic radicals, we may mention, on the one hand, the theoretical exposition of the doctrine of types and of organic replacement, so ably set forth by Dumas; and on the other, the practical isolation of many radicals long supposed to exist, but not hitherto obtained in a separate state—the preparation, by artificial processes, of numerous organic compounds possessed of alkaline properties, (organic alcales)—and the similar artificial prep-

aration of compounds which are naturally produced in the animal and vegetable kingdoms. The two latter points are deserving of a brief illustration.

It was long believed that the compound bodies formed and found in the living organism, whether animal or vegetable—which compose their tissues, or are contained in the fluids which fill their vessels—were specially produced by the agency of the principle of life; that in this agency consisted the main distinction between mineral and organic compounds; and that the production of the latter was beyond the reach of human art, operating upon mere dead matter. This belief has been gradually undermined by the progress of discovery. As early as 1811 it was known that starch and woody fibre could be transformed into sugar, and in 1822, that starch or sugar could be changed into the acid of ants (formic acid.) But in 1828, the remarkable fact was established, that the characteristic animal substance, *urea*, could be artificially prepared from certain compounds of cyanogen. In later years the number of such substances previously supposed to be characteristic of living beings, which can be prepared by art, has been greatly augmented. A persuasion is in consequence by degrees diffusing itself, that what is called the power of life has no exclusive influence in compelling the elementary bodies to unite after any special manner, so as to produce combinations to which their ordinary affinities in fitting circumstances do not naturally dispose them. And many are of opinion also that, as our knowledge of the influence of circumstances over these natural affinities increases, we shall be able to imitate more and more closely, and in far more frequent instances, the combinations hitherto considered peculiar to living structures. This opinion derives countenance and strength from a consideration of the chemical history of what are called organic alkalies.

It was regarded by chemists as a matter of great scientific interest, when, in 1817, Serturner fully established the presence in opium of a compound body, *morphine*, possessing alkaline properties, the existence of which he had already announced in 1805. Still greater interest was excited, when, many years later, Liebig and Wöhler succeeded in preparing artificially certain compound organic substances of similar alkaline properties. Of such organic alkalies we now know nearly a hundred which exist in, or are obtained directly from, the parts or products of living animals and vegetables. This shows a very rapid extension in our knowledge of one class of natural compounds. But we can now reckon also seventy or eighty others which can be formed by art, and which are not known to occur in nature; while methods recently discovered by Wurtz, and especially by Hoffman, hold out the prospect of increasing almost indefinitely the number of this class of artificial organic alkalies. Now among organic alkalies there are some, such as morphine, quinine, &c., which are exceedingly valuable in medicine, and which are high in price and less abundant, because they can only be obtained as yet from vegetable productions which are of rare growth, or limited to special climatic regions. Among the most useful practical results, therefore, which we anticipate from our increased power in producing organic alkalies, is the discovery of methods by which these very valuable medicines may be prepared artificially, in any quantity and in any country.

But all our artificial imitations of natural prod-

ucts actually obtained or soon expected are prepared from substances already organized—by the mere transformation, that is to say, of the parts and products of living beings. A greater triumph, to which we look forward, is the power of putting together the single or dead elements, and of making them unite so as to produce compounds which with all our discoveries can as yet only be obtained through the agency, direct or indirect, of animal and vegetable life. The muscles of animals, and the fibre of wood, for example, consist of distinct and definite chemical compounds—fibrine and cellulose they are respectively called—which our art has not yet been able to imitate, and which many have supposed to require for their production the special agency of the principle of life. What we hope finally to attain is the power of forming from their elements the chemical compounds or raw materials—in this instance the fibrine and the cellulose—of which the muscle and the wood are chiefly composed. Of the first steps in this new career we obtain a glimpse in the artificial production, still somewhat uncontrollable, of ammonia and cyanogen in our fires and furnaces.

When we accomplish this, probably the utmost limit to which our art can aspire, the special functions of the principle of life will appear to be restricted to the higher purposes of putting these materials together so as to form the tissues and parts of living structures, and of transporting them and building them in, just where they are required. It is as if we might hope to prepare all the varied materials for a great building, without the hope of ever superseding the intelligent architect who designs the intended construction, or the living hands which are to put the building materials together.

Yet, from the power over matter with which existing progress has already invested man, how wondrously interesting are the results and substances which he can produce at will! One of these substances takes fire, and glows brilliantly when simply exposed to the air—another starts into flame when it is touched with water or with ice—a third shines in the air with a paler and more lambent but almost perpetual light—and the smell of a fourth is too nauseous to be endured. One gas when diffused through the air, in absolutely inappreciable proportion, affects those who inhale it with violent catarrh—another, when inhaled, exhilarates with a happy but fleeting intoxication—a third, if breathed but once, suddenly arrests the current of life. A single drop of one fluid, if swallowed, will produce instant death—of another, will set in motion the whole contents of the alimentary canal—while the vapor of a third will produce speedy insensibility. One solid substance, if merely touched, will crumble to powder and change its color—another by gentle friction will explode with a terrific detonation—while others again change by a single gleam of the brilliant sun, and produce the wonderful pictures of Talbot and Daguerre. Again, other substances are enriched with healing, balsamic and salutary virtues—assuaging, exhilarating, or strengthening at the experimenter's will—realizing, in a somewhat different sense, the aspirations of the later alchemists after a universal medicine.

And then how remarkable are the changes in the sensible properties of an organic compound, and in its relations to animal life, which are produced by a very small alteration in its chemical composition! It is sufficiently striking that the union of combustible hydrogen gas with fire-sup-

porting oxygen should produce the fire-extinguishing fluid, water, and that salutary common salt should contain, mollified and disguised by its combination with a metal, sixty per cent. by weight of suffocating chlorine. But these combinations, water and common salt, consist of equal atoms of each constituent, which may readily be supposed, by their union, greatly to modify the properties of one another. In organic compounds, however, containing many molecules united together, it is more surprising that the addition of a single molecule more should often entirely alter their properties and relations to life. Benzoyl, for example, contains twenty-one atoms—fourteen of carbon, five of hydrogen, and two of oxygen ( $C_{14}H_5O_2$ ),—and yet the addition of one of hydrogen to these twenty-one ( $C_{14}H_6O_2+H$ ) forms the high-flavored and poisonous oil of bitter almonds; or one of oxygen added in its stead ( $C_{14}H_5O_2+O$ ) forms the well-known solid, benzoic acid, to which our pastilles owe so much of their agreeable odor. In cinnamon, again, there are present twenty-seven atoms, and yet one of hydrogen added to these ( $C_{18}H_7O_2+H$ ) forms oil of cinnamon, and one of oxygen ( $C_{18}H_7O_2+O$ ), a solid substance called cinnamic acid. How very incomprehensible to us as yet are all such molecular changes!

Nor are the revelations less interesting which the analytical examination of organic bodies has made in reference to matters which concern our daily tastes and preferences. The bouquet of wine is due to the presence of a peculiar ether, of which the mode of making or preserving the wine more or less favors the production. The wine of the grape is distinguished by containing tartaric acid, that of the apple and the pear by the presence, instead, of the often less pleasant or less wholesome lactic acid. The mineral matter of the flesh of animals contains much potash and phosphoric acid, but scarcely any soda, and only a small per-centage of oxide of iron;—that of milk contains, along with much potash and phosphoric acid, a considerable proportion of soda also, but still less iron than is found in flesh;—while that of blood contains only a small per-centage of potash and phosphoric acid, but nearly half its weight of common salt, and from seven to ten per cent. of oxide of iron. How very striking to the physiologist are such results as these, of which our books are full—how suggestive of applications to the arts, the wants, and the welfare of the whole human race!

Thus far we have spoken of organic chemistry only in its pure sense. But, like the inorganic department, it connects itself with other natural sciences, which are often considered independent, and, in the promotion of some of them, it is assuming an influential and leading place. We have already alluded to the natural subdivision into vegetable and animal chemistry, to which the abundance of its materials has given rise. But besides this, its applications to medicine fill a large space in our pharmacopœias and treatises on *Materia Medica*, and in those, which, like Simon's "*Handbuch der angewandten Medezinischen Chemie*," are devoted to what may be distinguished as purely medical physiology. The general physiology both of animals and of plants is now also prosecuted mainly as a department of organic chemistry. As regards the former or animal physiology, an able and trustworthy exposition of the present state of our knowledge is contained in the "*Lehrbuch der Physiologischen Chemie*," of Dr. Lehmann, of which the second

volume has just been published. Nor can the microscopical examination of structures, which has hitherto guided both animal and vegetable physiologists so much, any longer proceed without chemical aid. The microscopic investigator, besides an eye trained to observe, must for the future possess also a knowledge of the chemical relations and reactions of bodies, and considerable tact in minute chemical manipulation, if he is to carry forward those more refined physiological inquiries which now form the special field of the general histologist. In what way this combination of skill and knowledge is to be applied, and to what important consequences it may lead, will be best learned by a perusal of the volume of Professor Mulder, "*On the Chemistry of Animal and Vegetable Physiology*."

In chemical physiology, that which relates to man in a state of health and of disease—or physiological and pathological human chemistry—has naturally most interest for us. Already in 1806, in his published work, *Animal Chemistry*,\* Berzelius had collected together the little that was then known, and had himself thrown considerable light upon the chemistry of life. During the remainder of his career he never lost sight of this department; and the experimental results—his own and those of Tiedeman, Gmelin, and others—which he embodied in every successive edition of his "*Lehrbuch*," and the yearly critiques on its progress which found a place in his "*Arsberättelse*," caused him to be long regarded as the highest living authority upon the subject.

Among the chief later discoveries in animal chemistry was that of Protein, and its compounds, by Professor Mulder of Utrecht, first published in 1838. Notwithstanding the angry and personal discussions to which this substance has given rise among eminent chemists, and the obscurity which some still believe to hang over its composition, it must be conceded that the discovery itself forms an era in the history of animal chemistry. It has enlightened us upon the composition of animal fluids and tissues, and upon the qualities and uses of different kinds of food; and has given rise to some most beautiful and interesting speculations on the natural relations between animal and vegetable life. The young chemist who has not read the eloquent lecture of M. Dumas on the "*Chemical Statistics of Organized Beings*,"† has yet to be introduced to one of the most delightful little books in the whole range of chemical literature.

But our chronological account of chemistry in its applications to physiology now brings us to another era—that of Liebig, to which we must briefly advert. To its history, both animal and vegetable, this celebrated chemist has not only contributed a large stock of direct and peculiar knowledge, but he has impressed nearly the whole subject, for the present, with the ardent and speculative character of his own mind. It forms, indeed, a fine study to the chemist, to place side by side the mental characteristics of the older Berzelius and the younger Liebig, as instructive philosophers. The slow, calm caution of Berzelius, who trusted little to theory, and never confidently adopted any views, in support of which sound reasons or carefully obtained experimental results could not be adduced, was admirably fitted

\* *Föreläsningar i Djurkemien*. Stockholm: 2 vols. 8vo., 1806-08.

† *Essai de Statique Chimique des Êtres organisés*. Par MM. Dumas et Boussingault. Troisième Edition, 8vo. Paris, 1844.

for basing the incipient science upon a sure foundation. But caution does not attract; and hence one reason why the great Swede never obtained in England even the temporary favor and regard which the impatient and confident style of Liebig so suddenly acquired. Tired of the colder manner, and more assured steps of his predecessors, our eager temperament disposed us to a ready reception of the bold and dashing hypotheses with which Liebig introduced his more popular systematic works.

We shall never ourselves forget the interest, most like that awakened by our first perusal of *Ivanhoe*, with which we read the earlier memoirs on the cyanic acids, which he published in conjunction with Wöhler. And we have already mentioned the high esteem in which he was held by Berzelius, at a time when he was esteemed simply as the author of analytical memoirs, many of which were certainly very beautiful. On the other hand, a due regard and respect for Berzelius upon the part of Liebig appear to have been shown until after the year 1840. In that year Liebig published his "Organic Chemistry applied to Agriculture and Physiology," and two years later, his similar work on the "Relations of Organic Chemistry to Physiology and Pathology."

In his biographical sketch of Berzelius, "Minnesfest öfver J. J. Berzelius," Professor Siljerström of Stockholm informs us that previous to the appearance of one or other of these works, Liebig proposed by letter to dedicate it to Berzelius, and inclosed a dedicatory note for his approval. Berzelius, in his reply, added to his thanks for the intended compliment, the remark "that nothing mortal deserved so great praise;" that if the note was to accompany the dedication, he must decline the honor; and the more positively as in his "Yearly Report" personal considerations could not prevent him from freely commenting upon the scientific views which might be advanced in the intended work. The book subsequently appeared with the dedication,\* but without the dedicatory note. The critique which followed in the "Årsberättelse af Berzelius," and his condemnation of what he designated as *Probabilitet's Physiologie*, and the subsequent more searching examination of the work by Professor Kohlrausch, of Göttingen,† are still fresh in the recollection of chemists; as also is the angry reply of Liebig to the remarks of Berzelius, inserted first in his journal, and published afterwards in a separate form. In the so-called "Probabilitet's Physiologie" of Liebig, there is much beautiful poetry. Berzelius was alarmed in proportion to the genius displayed in these speculations. The influence for evil in Liebig's seductive example had made so strong an impression upon his cautious mind—a mind advancing only from the known to the unknown—that he expressed to us, towards the close of 1842, his firm belief that the writings of Liebig had done more harm to the safe progress of physiology than could be undone for forty years to come.

We will not discuss this subject, though our sympathies and convictions incline us to the views of Berzelius. Few men have succeeded in obtaining warmer friends and supporters from among his pupils, or of making more numerous and bitter

enemies among his equals and contemporaries, than Liebig. A most undesirable facility for publishing, without supervision, what has been hastily written, is afforded by the editing of a journal. To this cause, rather than to any uncontrollable spirit or difficulty of temper, we ascribe the coarse epithets applied to Fritzsche and Gerhard, the disparaging terms in which Mitscherlich and Berzelius are spoken of, and the strong expressions poured out in successive contests with Mulder and Dumas. Nor do we ascribe to anything worse than haste or thoughtless oversight the neglect with which, especially in the "Chemistry applied to Agriculture," so many of his predecessors in the same walk are passed over unnamed and unacknowledged, if not unkindly spoken of, at the very moment that he was making use of their experiments and results. Even the outrage to the dignity of pure science implied in the securing of patents for medicines and manures, we regard with leniency in the father of a growing family. Yet it cannot be denied that such circumstances as these have both disgusted and alienated many of his admirers.

We have observed, as the characteristic of Berzelius, that he never went further in his theories than known facts would warrant. Accordingly the philosophical world came at last to receive his opinions as eminently safe. Again, it was a recognized merit in the great memoirs of Gay Lussac, that he began by giving an introductory *résumé* of all that was known or had been done previously by others upon the subject of which he was about to treat. The least that can be said of the school of Liebig is, that it has not discouraged hasty and confident over-speculation, or that neglect of past chemical history and literature, which either passes over, or ignorantly appropriates, the thoughts and discoveries of its predecessors.

One feature in the course pursued at Giessen—more resembling the tactics of a fierce party in politics than of a school for the investigation of scientific truth—is not undeserving of reprehensible mention in a philosophic sketch like the present. Formerly, no young man beginning to handle his chemical tools, would have presumed to set up his own authority in contradiction to those of the elder chemists of the time. Suspecting himself rather, his trials would have been repeated and re-repeated, till it was made certain on which side the error lay. At Giessen this custom was abandoned. The tyro of a few months was pitted directly against the most trusted analysts, and set to repeat or refute their experiments. Than this, considered as a school exercise, nothing could be better. But to the results of these juvenile experiments, almost necessarily different, precipitate currency was given in the "Annalen der Pharmacie" as corrections of the errors of their distinguished predecessors. And while not unfrequently such pretended corrections have been proved to be themselves erroneous, they have been productive of a double evil. On the one hand, they have unduly ministered to the precocious vanity of students, probably never heard of afterwards, and have taught them the wretched lesson of raising a reputation by undervaluing that of others: on the other hand, they have unhandsonly detracted from the character of older chemists, and, besides all personal grievances, have caused a serious injury to science by wasting, over the verification of researches which had been carelessly called in question, much valuable time, which might otherwise have been usefully employed.

\* This must refer to the German Edition, as the English Editions of both books are dedicated to the British Association.

† Physiologie und Chemie in ihrer gegenseitigen Stellung, beleuchtet durch eine Kritik von Liebig's Thierchemie. Göttingen: 1844.

The attainment of truth ought to be the supreme aim and motive of the philosophical chemist. But how often, alas! do personal rivalry—a haste to be distinguished—the love of novelties, of novel views and novel names, because they are our own—the dislike of another's views, because they are another's—a want of the ability, intellectual or moral, to weigh and justly appreciate evidence—the culpable desire even of causing pain to an opponent—all the frailties, in short, to which man is exposed, interfere with this aim and motive, and retard the establishment of what is true!

But before we pass from the subject of chemical physiology, the general reader may be pleased to learn, by an intelligible example, in what way the results of experiments performed among the beakers and jars of the chemist, are applied in practice to raise the condition and abate the sufferings of man.

Any substance that has to make its way from the human stomach, through the vessels which proceed to the various parts of the body, must be capable of being dissolved by the fluids of the body. An insoluble substance will pass unchanged and unabsorbed along the alimentary canal, and escape from the body in the usual manner, without producing any materially sensible effect. A soluble substance, on the contrary, passes into the blood, and if nutritious nourishes, if poisonous more or less injuriously affects the functions of life. Thus chemists are now familiar with methods by which in their laboratories many soluble poisonous substances can be united with other bodies, so as to become insoluble, and in this new state be rendered capable of being introduced into the stomach without injurious consequences. To perform such an experiment in the stomach, is to administer an antidote, of more or less certain efficacy, against a poison which has been previously swallowed. In this way, lime and magnesia are antidotes against oxalic acid, the white of egg against corrosive sublimate, hydrated per-oxide of iron against white arsenic, and so on. These severally combine with the poisonous substance when brought in contact with it in the stomach, render it insoluble, and consequently inert. Here is a very intelligible application of chemical knowledge; but we have explained it on our way to a much more beautiful one.

Among familiar examples of slow poisoning is the disease known by the name of painters' colic. It is produced in lead mines and lead works by inhaling lead dust, and elsewhere not unfrequently by drinking water impregnated with lead. The metal, being introduced into the system in a soluble form, makes its way everywhere among the tissues, and lays the foundation of chronic and frequently returning pains. But diluted sulphuric acid or sulphuretted waters, like those of Harrogate, render lead insoluble in water, whether in the body or out of it, and are therefore prescribed as common remedies for the painters' colic. Observation, meanwhile, has shown that these remedies, though they assuage or remove the symptoms of the disease, still leave the lead which caused it diffused in an inert state through the body—ready, when favorable conditions arise, again to act injuriously on the bodily health. It is only the other day that M. Melsens, of Brussels, perfected this subdivision of chemical physiology, and gave us the means both of detecting the lurking presence of the metal in the system, and of entirely expelling it as a cause of disease. A substance known in chemistry and

pharmacy by the name of iodide of potassium is capable of decomposing the insoluble compounds of lead, and of bringing the metal into a new condition in which it readily dissolves in water. If a person be poisoned with lead, his system struggles to throw it off, the metal makes its way through his kidneys, and can be detected in his urine. Cure him by sulphuric acid or sulphuretted water, and with the pain the lead disappears from his urine, but remains in the system. Give him now a dose of iodide of potassium, and the pains of poisoning return, and lead reappears in the water. A large dose will prostrate him with colic, but small doses, at frequent intervals, will gradually wash away the metal without any sensible suffering. The cure is complete as soon as a large dose of the medicine brings neither a return of the anguish, nor of the lead into the fluid excretions. So, mercury, after protracted salivation, lingers likewise long in the system, but the same chemical compound washes it effectually out; and over certain other hitherto unmanageable metals it exercises a similar power. The medical practitioner learns to form in the interior of the patient, and for his cure and comfort, the same preparations which the chemist, for the purposes of science, has already often formed and studied in his laboratory.

But the manner in which chemistry has been of late indispensably connected with far more refined physiological inquiries, bearing ultimately on questions of human health, may also be made intelligible.

A knowledge of functional physiology is now necessary to practical medicine. A full-bodied man is prostrated with apoplexy, heavily breathing, and speechless, and scarcely a subject for hope. Where inordinate eating has been an immediate cause, to empty the bowels is to give a chance of returning sense and life. But the internal stomach is inaccessible, and the medical attendants look grave, until one bolder than the rest removes by known means a portion of the skin from the outer surface of the digestive region, and applies croton oil to the raw spot upon the senseless body. The powerful medicine is sensibly absorbed, the bowels are moved, and the patient is saved. A mere knowledge of the functions of tissues, and the nature of remedies, suggests curative applications of this description. But among the most hopeless, if not the most distressing and painful diseases to which humanity is liable, is diabetes. It is characterized by the presence of sugar in the urine, a substance not usually produced in healthy persons. Many tests by which its presence and quantity can be ascertained, have been supplied by chemistry; and the daily quantity indicates the progress or retrocession of the disease. But to check this abnormal production by administering food not easily converted into it by known processes, was nearly all the advice which chemistry could in this case give to medicine, and it constituted nearly all in the way of special remedy which the physician was able to employ. The cause and seat of the disease were alike unknown. A sudden glimmer, however, appears to have been thrown upon the subject through an observation by M. Bernard—that if a slight wound be inflicted upon the fourth ventricle of the brain, a little above the origin of the eighth pair of nerves, the pneumo-gastric, which proceed among other organs to those of digestion, the urine becomes charged with sugar, and presents the other characters usual in diabetic disease. The study of chemical symptoms, therefore, must be combined

with that of the chemical functions of the different parts of the body, and of the derangements of those functions which almost insensible lesions may occasion. How curious that in a malady where both departments of science are called in, chemistry should almost exclusively fix the attention upon the urine, while physiology bids us turn our efforts chiefly to the condition of the brain! It will readily occur to some of our readers that M. Bernard's observation, if fully established, communicates directly with many other most interesting questions still open to discussion, such as those which relate to the true theoretical action and real practical effect of substances employed as food for man and other animals.

Intimately connected with inquiries such as those we have been noticing, is Sanatory chemistry—a subject very popular in its nature, wide in its extent, important to all classes of society in every country, and yet unfortunately but little understood, and until recently as little appreciated. The composition of the atmosphere—the nature, needs, and effects of healthy respiration—the properties and influence of injurious gases and exhalations—the constitution and wholesome chemical and other influences of the sun's rays—the priceless value of pure and abundant water—the impurities of wells in towns—the blessings which attend upon cleanliness of person, and in our streets and dwellings—these are some of the comprehensive questions which this division of scientific inquiry includes, and into which chemical investigation is daily making way.

Then Forensic chemistry brings us into close contact with questions of law and the controversies of the courts. What is called Medical Jurisprudence includes only a part of forensic chemistry, and yet it boasts the elaborate treatises of Orfila, Christison, Taylor, and Beck, besides many valuable German works, and countless minor books and dissertations. Cases of poisoning form the staple branch of this department. They have recently been of unusual frequency in England, and in some instances of so wholesale a character as forcibly to arrest the attention of the public, and to call for legal restrictions on the sale of poisonous substances.

The introduction of a bill by Lord Carlisle for this purpose, and its subsequent passage in the present session of Parliament, has recalled to our mind a state of things which existed in Normandy a few years ago, the cause and cure for which may suggest the adoption of other measures of prevention among ourselves also, in addition to the legislative measures already passed into a law. In Normandy, it had long been the practice, as it still is in some of our southerly English counties, to use white arsenic for the steeping of seed corn, with a view to the destruction of insects and fungi—as the midge, smut, rust, &c.—by which grain crops are frequently very much injured. This abundance of arsenic among the people, and their familiarity with its use, brought every season before the courts, from the rural districts, a yearly crop of poison cases, in which arsenic had been employed for the destruction of human life. With a view to provide a remedy, it was at first remitted to the Departmental Society of Agriculture, to inquire whether this use of arsenic was indispensable, and whether in the *chaulage du blé* other substances of a less dangerous character might not replace it both effectually and economically. The experiments made by direction of the society enabled them to

report that arsenic might be dispensed with, and that less deadly substances were as cheap and efficacious. A law was passed in consequence, forbidding the use of arsenic in the preparation (pickling) of seed corn, and the annual group of poisoning trials disappeared. If, as we believe, it is chiefly in those parts of England where arsenic has been so employed for agricultural purposes, that our home poisonings with it have also been most frequent, the abandonment or prohibition of it in the farm might not only remove in some cases the means and direct temptation to crime, but might in others take away also a source of evil suggestions which afterwards lead to the purchase of poison for otherwise unthought-of ends.

How oft the sight of means to do ill deeds  
Makes ill deeds done!

Forensic chemistry, besides such questions as properly engage the medical jurist, embraces also a crowd of inquiries, almost endless in variety, connected with the validity and alleged infringement of patents, with the adulteration of substances liable to duty for the purpose of defrauding the revenue with the creation of nuisances, or with the injuries produced by manufacturing operations. It is also more or less directly interested in all those adulterations of articles of domestic consumption, by which the health and comfort of the people are liable to be affected, and against which the public are driven to seek protection in courts of law. Upon these topics we cannot dilate. But such of our readers as feel an interest, especially in regard to the instances we have mentioned last, will consult with advantage the excellent manual which Dr. Adolf Dufos has dedicated to this vitally important subject.\*

The small remainder of our space is due to the consideration of general chemistry as an aid to industry, both individual and national. And here, taking the more comprehensive works of Schubarth or of Knapp, as our guides, we might illustrate by a thousand special cases the direct money value of chemical knowledge, and even of profound chemical research, to the material prosperity of a country like our own.

In its application to the arts of life, indeed, almost as easily as in any other way, the progress of this science can be palpably made manifest to the most ordinary understanding. If the older work of Aiken on the Chemical Arts be compared with the later dictionary of Dr. Ure, or the treatise of Dumas, and these again with the still later German publications, it will be seen not only that all the separate arts known to the older author (Aiken) have been greatly improved—old difficulties, delays, and expenses removed by the discovery of new methods—but that numerous new arts are described, which in the interval have sprung into existence and assumed a more or less important place among the sources of national or local wealth. And further, by a comparison of the newest work on Chemical Technology with the one immediately preceding it, the rate of progress at the present moment will be found to be more rapid than at any previous period in chemical history.

\* Die wichtigsten Lebens-Bedürfnisse, ihre Aechtheit und Güte. Breslau: 1846. Now that coffee and chicory, and wheat flour, and so many other articles of daily use are the subjects of countless adulterations, a book like that of Dufos', but adapted to our circumstances, has become a want in English literature. Since Accums' "Death in the Pot," we have had no special book devoted to this subject.

Or a person less conversant with books, but who takes some interest in the matter, may arrive at the same result in another way. If, bearing clearly in his mind what he had seen during a pains-taking visit to the workshops of London, Birmingham, Sheffield, Manchester, or Glasgow, some thirty years ago, he should now again revisit these centres of industry, and attempt to compare their present with their past processes and products, the change would appear absolutely wonderful. The new, more speedy, and simpler modes of arriving at the same results—the numerous subdivisions of labor, elevating what were probably regarded as mere processes of detail into separate manufactures and branches of business—the multitude of new and totally distinct arts and workshops—the new intellectual resources which even common men seem now to have at easy command—and the new uses to which the waste materials of former years are now applied—these will astonish him almost as much as our machine shops, in which the fingers of the dexterous workman appear to persuade rather than compel the inert material to do his bidding, until the dead metal seems fashioned to do something little less than think.

To trace from year to year the details of improvements like those which our visitor would recognize, is one of the most interesting occupations of the scientific observer. Difficulties bring out resources. Even apparently insurmountable crises in a manufacture only stimulate the energies of the conquering intellect. An important branch of industry appears about to succumb—to shift its locality at least, and take up a more favored home in another country—when chemistry suggests that its work should be done after a new fashion. The suggestion is adopted, and the greater perfection and economy which attend the change, give the old locality a fresh start, and secure to the failing manufacture fresh triumphs over dreaded rivals.

A change in fiscal regulations, the competition of slave labor and other causes, have threatened to root out the growth of sugar from our West India colonies. But a chemical experiment, made in Brussels by Melsens, suggested to him improvements in the treatment of cane-juice, which promise to give to capital and skilled labor in this branch of industry the same victory over mere manual toil, which in all other arts they have gradually been acquiring. Again, the progress of the art of spinning had not only enabled the cotton machinery to produce threads of a fineness which Indian beauties never dreamed of, but the costliest linen cambrics of Holland and Flanders were already surpassed by the produce of our native looms. The machinery of the flax mills, however, had exhausted its skill upon the stubborn material, which refused to stretch to a more subtle fibre, or produce a finer yarn. But chemistry examined the substance by which the fibres are naturally held together; and forthwith spinning by the aid of steam heat compelled the glutinous matter to relax its hold and the delicate fibres to slip along each other into threads of previously unattainable tenuity. The steeping of flax, too, was a tedious process, pregnant with nauseous exhalations and with frequent disease. For ages particular streams were famed for their efficacy in steeping, and particular localities enjoyed centuries of reputation for their unspun flax. The fineness of the fibre depended on the plant being neither full grown nor rank; and it was held impossible to grow to a profit both seed and stem at once. But a new mode of steeping has

been devised by Schenk, owing to a chemical discovery. This invention has shortened the process to a few hours; has placed all localities on an equal level, by making all tolerably pure waters equally available; has abolished the yearly nuisance and frequent disease; has extracted the finest fibre from the rankest and ripest plant; and has thus placed within the reach of the farmer and of the country the double profit of a full crop of ripe seed, along with a heavy harvest of luxuriant stems. Even upon this improvement further improvements are already spoken of, and a rival patentee is threatening to supersede, by the employment of steam, the hot water employed in the process of Schenk. Further, a cloud was approaching the factories of Lancashire. Cotton, the growth of a rival country, it is feared, might become scarce, and rise in price—consequences which would seriously embarrass our staple manufacture. Another chemical process here steps in, tears still further in pieces the single hollow fibres of the flax, and produces a material which resembles cotton in appearance, can be spun with the same machinery, and, according to the discoverer, M. Claussen, may in all probability be brought into the market at a price low enough to compete successfully with natural cotton. Thus a new material is likely to be supplied to our home manufactures, and at the same time a boundless field opened, and a new stimulus given, to our home agriculture—a new bond, in fact, created between the already inseparable interests of our town and country communities. M. Claussen already speaks of larger orders than can be supplied.

As in this way the science of chemistry has lent itself to the advancement of one art, so it has done with a thousand others.

The paper on which we write—the child of waste flax and cotton fabrics—tells us daily of its obligations to chemical research. The discovery of chlorine gave a method of removing all color from tissues which had been dyed or printed with vegetable or animal colors. It thus widened the sources of the supply of his raw material to the manufacturer, and kept down the price of paper to the consumer, while the demands of the press and the post-office increased.\* Then, after numerous adjustments had perfected this application, it was found difficult, under certain circumstances, to prepare a pulp so free from excess of chlorine as to prevent, in the lapse of time, the bleaching of the ink upon the paper which was made from it. But this difficulty also has been overcome; and the prescribed use of an *anti-chlor*, as the makers call it, employed according to their prescription, removes the entire residue of the bleaching substance, and secures to well-prepared ink an indelible permanence. Still the bleached material is often

\* We have before us a literary curiosity which indicates another direction into which the scarcity of material guided the research of paper-makers about the beginning of the present century. It is entitled, "Historical Account of the Substances which have been used to describe Events and to convey Ideas from the earliest Date to the Invention of Paper: printed on the first useful Paper manufactured solely from Straw. London, 1800." It is a thin 8vo., of which part is printed on paper made from straw, and the remainder on paper made from wood. Among the many uses to which it has been proposed from time to time to turn the Irish bogs, one is to convert them into paper! We possess a sample of beautiful pure white pulp, fit for the paper-mill, prepared from peat by chemical treatment; and we believe both straw and peat are now used, to some extent, in the manufacture of inferior kinds of wrapping and hangings paper.

deficient in whiteness, to disguise which the manufacturer copies the expedient of the laundress; or a decided blue tint, as in the paper before us, is wished for, and the requisite coloring matter must be added to the pulp.

The preparation of the beautiful smalts of our workshops from the crude poisonous ores of cobalt is one of our latest triumphs. This fine blue was employed by the paper-makers, but the best qualities were very dear. The precious ultramarine, which the devotee of the highest art could barely afford to purchase, was looked upon with covetous eyes by the cultivators of this and of many other arts of life. But to obtain it, in sufficient quantity, and at a reasonable price, was beyond their hope. Chemists analyzed it, and determined its composition; in their hands the ingredients of which it is made up still resisted all persuasion to reunite into the coveted blue. Men's eyes being instructed, however, a blue substance was observed occasionally to present itself in the refuse of certain processes of chemical manufacture. This refuse was collected, examined, analyzed, and found in quality and composition to be identical with the natural ultramarine. An after study of the conditions under which it was produced in the furnace, suggested the successive processes of a new manufacture; and the paper-maker, along with a thousand others, now rejoices in supplies of Nuremberg blue, or artificial ultramarine, which can be made in any country, from materials common and abundant, and with shades of color which vie with the brightest and most beautiful that live on the immortal canvass.

Nor do results of a higher order fail at times to show themselves. We close by one brief example.

Among the substances which are contained in, and are necessary to, the composition and usefulness of the bread of man, is one to which chemists give the name of phosphate of lime. This material the growing corn extracts from the soil. Without its presence in sufficient abundance in the earth through which its roots spread, the plant flourishes poorly, the ear is ill-filled, and the produce of grain scanty. The bones of animals contain this phosphate of lime, and it has for half a century been customary to apply them in a crushed or broken form to the soil to fit it for the healthy growth of luxuriant crops of corn. But chemistry established the fact that certain stones and rocky masses which occur in various parts of the earth, contain the same phosphate of lime. It has recently, therefore, advised the grower of grain to take advantage of these mineral masses. And now, after previous preparation, by a simple chemical process, they are extensively employed to impart fertility to the soil. In the account of the temptation of our Saviour the tempter said, "If thou be the Son of God, command that these stones be made bread." In our indirect conversion of stones into bread, the prosecution of science has conferred upon man a power analogous to that which to common apprehension partakes of the divine. It is the Deity rewarding with a portion of his own power, the right exercise of that sublime intellect which is a portion of his own spirit.

Our illustrations of the wide dominion and vast applications of this growing science must here cease. We have not dwelt so long upon its history and recent progress with the view of merely placing before our readers an intelligible picture of its actual importance at the present moment. Our hope is, that from the glimpse we have given of its

past and present, an idea may be formed also of the great future which awaits it, and a right estimate made of the position it ought to occupy in national estimation, the proportion of study which ought to be generally devoted to it as a part of liberal education, and the share of sympathy and support which are due to those who cultivate it by profession.

A science which asserts a rational sway over every kingdom of nature—which is indispensable as an auxiliary to so many other branches of physical knowledge—which explains so many most striking natural appearances, and which is related in such countless ways to the arts and conveniences of life, is surely entitled to as high a place as any other among all the sciences which, in the progress of civilization, are contending for precedence and homage. It has this advantage, too, above almost all other sciences, that the condition of man here below depends in great measure for advancement upon its future progress, while no other pursuit has enlarged its sphere so wonderfully, nor been rewarded with such astonishing success. The promises of alchemy were nothing to what has already been accomplished.

"We have no curiosity about that of which we know nothing," was said by Sismondi. It is the almost total ignorance of chemistry on the part of our older university men, which has hitherto excluded this branch of knowledge from the list of subjects of instruction in nearly all the educational institutions over which their influence extends. We can neither appreciate the claims nor the value of a science of which we have been taught nothing. We cannot even by private study learn to appreciate them justly when the science is one which is incapable, from its very nature, of being taught by books alone.

The modern practice in our English colleges and universities of selecting the heads and teachers almost exclusively from their own house-taught members or alumni, tends to perpetuate the exclusion of modern and growing branches of knowledge, and to stereotype old forms and confined limits in collegiate and scholastic teaching. Even the now long-favored Greek had once difficulties to overcome similar to those which at present beset the sciences of observation. The pressure for innovation and improvement must, therefore, be made from without by those who feel the urgency of each particular instance; and in this way strength will be given to the hands of the few men within, who are aware of the real advances and value of positive knowledge,\* and of the demand for it which exists throughout the great body of the nation.

We have been struck by some facts and reasonings in connection with this subject in a pamphlet† recently published by Principal Wayland, of Brown University, Providence, Rhode Island. From this pamphlet it appears that, though the population of New England has been greatly increasing during the last twenty or thirty years, the number of students at its various colleges and universities, even

\* Oxford, we are glad to see, has broken the ice, and has recently raised the stipends of the Professor of Chemistry, and of the Reader of Experimental Philosophy, and of the Camden Professor of History, to 300*l.* a year each: with 250*l.* a year each to the Readers in Mineralogy and Geology, and to the Professor of Moral Philosophy.

† Report to the Corporation of Brown University, on the Changes in the System of Collegiate Education. Providence: 1850.

those of most repute, has been gradually decreasing. At first this was ascribed to the great expense of the existing system of college education, and efforts were made to lessen it by lowering the fees and the cost of board. But the reduction in numbers still went on, and it has not been arrested even in those colleges in which education has been given gratuitously. It was not owing, therefore, to any undue expense in the system. Nor did it arise, as Dr. Wayland shows, from want of talent in the professors, from defective modes of teaching, or from inefficient examinations for university honors. He concludes, therefore, in mercantile phraseology, that "the article which the universities offer for sale is not such as the public want, and therefore they don't come to buy it." He proposes, in consequence, to the trustees of his own college, to remodel the whole system of instruction, to create new courses of study, comprehending those branches of knowledge which are actually in public demand, so arranged as to afford time to learn each branch as thoroughly as circumstances may require, and to attach to eminence in each honorary distinctions similar to those hitherto awarded in the form of degrees in arts. Thus, instead of one fixed and invariable routine, he would offer students the choice of several sets of equivalent studies, a due acquaintance with which on examination should entitle the candidates in them to equal honors. If a fair measure of success should follow this movement in Brown University, it must exercise a powerful influence upon the other colleges in the United States, and ultimately upon those of our own country.

But whatever fate may await the wide reform of Dr. Wayland, it is plain, we think, that in a century during which the progress of civilization has taken so distinctly positive and material a direction, the science of Chemistry, which presides over material progress in so many of its most interesting and important directions, cannot remain shut out from its legitimate place and influence in the educational institutions of the empire.

From the Examiner.

*The Kaleidoscope of Anecdotes and Aphorisms.*  
Collected by CATHERINE SINCLAIR, Author of  
"Lord and Lady Harcourt," &c., &c. Bentley.

THIS anecdotal commonplace-book deserves a word of praise. Coleridge advises every reader, and especially readers of scarce or out-of-the-way volumes, whenever they discover a sentence, story, illustration, or remark, which strikes them to be worth remembering, that they should straightway lay hold of and remember it, as a charity to other people. The excellent Captain Cuttle condensed Coleridge's advice into his famous aphorism—"When found, make a note of."

On this advice Miss Sinclair has acted, and her note-book is pleasant reading. There is nothing rare or out-of-the-way in the sources from which its entertainment is drawn; but the anecdotes and illustrations are generally clever in themselves, and a tone of good breeding, good society, and good sense pervades the selection.

We had no idea that Hannah More had ever said so good a thing as this:

Hannah More said to Horace Walpole: "If I wanted to punish an enemy, it should be by fastening on him the trouble of constantly hating somebody."

This is a profound saying of Hobbes:

There is no action of man in this life, which is not the beginning of so long a chain of consequences, as that no human providence is high enough to give us a prospect to the end.—*Thomas of Malmesbury.*

Lavater hit upon the same deep truth when he so finely exclaimed that the man who acted well at the moment was performing a good action for all posterity.

Here is piece of true wit:

Curran, being angry in a debate one day, put his hand on his heart, saying:

"I am the trusty guardian of my own honor."

"Then," replied Sir Boyle Roach, "I congratulate my honorable friend on the sung sinecure to which he has appointed himself."

And here (in our judgment) is a piece of true eloquence. *O si sic omnia!* That all after-dinner speeches could but be like these!

A silver cup having been voted to an officer once for some gallant action, a dinner was given to celebrate it, and after the cloth had been removed, the whole assembled company waited with interest to hear the eloquence that should attend the presentation.

The president rose, and thrusting the cup towards the officer, said:

"There's the jug."

To which the other replied, taking it up with pleasure, and examining it:

"Is this the mug?"

We have a sneaking kindness for George the Second, notwithstanding what he said about Hogarth, and we always read this anecdote with pleasure:

George II. being informed that an impudent printer was to be punished for having published a spurious King's Speech, replied: "I hope the man's punishment will be of the mildest sort, because I have read both; and, as far as I understand either of them, I like the spurious speech better than my own.—*Lord Waldegrave's Memoirs*, p. 88.

Here is a perfect illustration of a genuine court-mourning:

When the Court of France went into deep mourning, it was thought necessary at one time to leave off card-playing, but M. de Maurepas restored the amusement, and produced the greatest relief by saying:

"Piquet is mourning."

Piquet was accordingly played night after night with all due gravity.

Sydney Smith is always welcome:

Sydney Smith's definition of the Popish Ritual:

Posture and imposture, flections and genuflections, bowing to the right, curtsying to the left, and an immense amount of man-millinery.

Anecdotes of the miser Elwes are common, but the subjoined we do not remember to have seen before. The respectable skinfint here openly expressed what English society has sneakingly acted upon for a good many years.

When the rich miser, Elwes, who left about a million of money to be divided between his two sons, was advised to give them some education, his answer was: "Putting things into people's heads is taking money out of their pockets."

From Fraser's Magazine.

## A JUNGLE RECOLLECTION.

THE hot season of 1849 was peculiarly oppressive, and the irksome garrison duty at Cherootabad, in the south of India, had for many months been unusually severe. The colonel of my regiment, the brigadier, and the general, having successively acceded to my application for three weeks' leave, and that welcome fact having been duly notified in orders, it was not long before I found myself on the Coimbatore road, snugly packed guns and all, in a country bullock-cart, lying at full length on a mattress, with a thick layer of straw spread under it.

All my preparations had been made beforehand; relays of bullocks were posted for me at convenient intervals, and I arrived at Goodaloor, a distance of a hundred and ten miles, in rather more than forty-eight hours.

Goodaloor is a quiet little village, about eleven miles from Coimbatore;—but don't suppose I was going to spend my precious three weeks there.

After breakfasting at the traveller's bungalow, we started off again. The bungalow is on the right hand side of the road; and when we had proceeded about two hundred yards, the bullock-cart turned into the fields to the left, and got along how it could across country, towards some low rocky hills, which ran parallel, and at about three miles' distance from the Coimbatore road.

After about two miles of this work, sometimes over fallow ground, sometimes through fields of growing grain, (taking awful liberties with the loose hedges of cut brambles, which, however, we had the conscience to build up again as we passed them,) sometimes over broken stony ground, and once or twice lumbering heavily through a rocky watercourse, we at last found ourselves on the grassy margin of a pretty little stream. Fifty yards beyond it, under the shade of a fine mango-tree, my little tent was already pitched; in five minutes I lay stretched on my bed, listening with ravished ears to the glorious accounts of my old Shikaree, who had just come in, hot and tired, from the jungle. He had much to tell—how since he had been out, three days, he had tracked the tiger every morning up and down a certain nullah; how the brindled monster had been seen by different shepherds; and, what was still more satisfactory, how he had but yesterday killed a cow near the spot where the hut had been built. It was now midday;—how to spend the long hours till sunset!

After making the tired man draw innumerable sketch-maps in the sand, with reiterated descriptions of the hut, &c., I allowed the poor wretch to go to his dinner; and in anticipation of a weary night's watch, I squeezed my eyes together, and tried to sleep.

The sun begins to acquire his evening slant, and I joyfully leave my bed to prepare for my nocturnal expedition. The cook is boiling fowl and potatoes; they are ready; and now he pours his clear strong coffee into the three soda-water bottles by his side; everything is ready in the little basket, not forgetting a bottle of good beer. Now then commences the pleasing task of carefully loading our battery.

Come, big "Sam Noek," king of two-ouncers, what is to be the fate of those two great plums that you are now to swallow? Am I to cut them out of the tiger's ribs to-morrow!—or are they idly to be fired away into the trunk of a tree, or drawn again?

All loaded, and pony saddled, let us start; the two white cows and their calves; the mattress and blanket rolled up and carried on a Cooly's head; Shikaree, horsekeeper, and a village man with the three guns, while I myself bring up the rear. Over a few ploughed fields, and past that large banian-tree, the jungle begins.

What is this black thing! and what are those people doing? That hideous black image is the jungle god, and to him the villagers look for protection for their flocks.

How they stare at the man dressed in his mud-colored clothes, who has come so far, and sacrifices sleep and comfort, to sit and watch at night for the evil genius of their jungles! Children are held up to look at him—at the English jungle-wallah, who drinks brandy as they drink milk, and who is on his way to the deepest fastnesses of the wooded waste, to watch for the tiger alone—a man who laughs at gods and devils—a devil himself. The Shikaree, who had been earnestly engaged in conversation with the oldest-looking man of the group, now ran up and informed me that the Gooroo had given him to understand that the Sahib would certainly kill the tiger this night, and that it was expected that he would subscribe fifteen rupees to the god, in the event of the prediction proving true. Come, we have no time for talking. Hurry on, cows and guns, hurry on! through the silent jungle, along the narrow path. How much further yet! Not more than a quarter of a mile; we are close to it. And now the people who know the whereabouts stop and look smilingly on one another, and then at the Sahib, whose practised eye has but just discovered the well-built ambush.

In a small clump of low jungle, on the sloping bank of a broad, sandy watercourse, the casual passer-by would not have perceived a snug and tolerably strong little hut—the white ends of the small branches that were laid over it, and the mixture of foliage, alone revealing the fact to the observant eye of a practised woodman. No praise could be too strong to bestow on the faithful Shikaree; had I chosen the spot myself, after a week's survey of the country, it could not have been more happily selected. The watercourse wound its way through the thickest and most *tigerish* section of the jungle, and had its origin at the very foot of the hills, where tigers were continually seen by the woodcutters and shepherds. There was little or no water within many miles, except the few gallons in a basin of rock, which I could almost reach from my little bower; and, to crown all, there were the broad, deep *puggs* of a tiger, up and down the nullah, in the dry sand, near the water's edge, of all ages, from the week, perhaps, up to the unmistakable fresh *puggs* of last night.

Let us get off the pony, and have a look at the hut. Pulling a few dry branches on one side, the small hurdle-door at the back is exposed to view, hardly big enough to admit a large dog; down on your knees and crawl in. Five feet long, four feet wide, and four feet high in the centre, is the extent of the little palace; a platform, a foot from the ground, occupies the whole extent to within a foot of the front end facing the bed of the watercourse. On this platform the mattress is laid, and some big coats and the blankets make a very comfortable pillow. Remove that little screen of leaves, and you look through a window, ten inches square, that commands a view fifty paces up and down the sandy nullah. Sitting on the end of the

bed-place, just behind the window, with your feet on the ground, nothing can be more comfortable; and, when tired, you only have to draw up your legs, and curl yourself on the mattress to enjoy a short nap, if your prudence cannot conquer sleep. Into this hut, which I have endeavored to describe, did I now crawl; the mattress was arranged, the handsome and carefully loaded battery was next handed in, and each gun placed ready for action; the cold fowl and bottle of Bass were in the mean while disposed of, and the soda-water bottles of cold coffee were stowed away in cunning corners.

The sun is resting on the hill-tops, and will soon disappear behind them; the pea-fowl and jungle-cock are noisily challenging amongst themselves, and the latest party of woodcutters have just passed by, showing by their brisk pace and loud talking, that they consider it high time for prudent men to quit the jungle.

To the deeply rooted stump of a young tree on the opposite bank, one of the white cows has been made fast by a double cord passed twice round her horns. Nothing remains to be done; the little door is fastened behind me, the prickly acacia boughs are piled up against it on the outside, and my people are anxious to be off. The old Shikaree makes his appearance in the nullah, and, wishing me success through the window, asks if "all is right?" "Everything; get home as fast as you can; if you should hear three shots in succession before dark, come back for me—otherwise, bring the pony at six to-morrow morning—and a cup of hot coffee, tell the cook."

They are gone; I still hear them every now and then, as they shout to one another, and as the pony scrambled through some loose stones in the bed of a ravine through which their road lies.

The poor cow, too, listens with dismay to the retreating footsteps of the party, and has already made some furious plunges to free herself and rejoin the rest of the kine, who have been driven off, nothing loth, towards home. Watch her; how intently she stares along the path by which the people have deserted her! Were it not for the occasional stamp of the fore leg, or the impatient side-toss of the head, to keep off the swarming flies, she might be carved out of marble. And now a fearful and anxious gaze up the bed of the nullah, and into the thick fringe of Mimosa, one ear pricked and the other back alternately, show that *instinct* has already whispered the warning of impending danger. Another plunge to get loose, and a searching gaze up the path; see her sides heave. Now comes what we want—that deep low! it echoes again among the hills; another, and another. Poor wretch! you are hastening your doom; far or near the tiger hears you—under rock or thicket, where he has lain since morning sheltered from the scorching sun, his ears flutter as if they were tickled every time he hears that music; his huge green eyes, heretofore half-closed, are now wide open, and, alas! poor cow, gaze truly enough in thy direction; but he has not stirred yet, and nobody can say in which direction giant death will yet stalk forth.

Whichever of my readers who has never had to wait in solitude, in a strange room of a strange house, has not indulged in that idle, speculative curiosity peculiar to such a situation, gazing on the pictures, and counting, perhaps, tables and chairs with an absurd earnestness of purpose—will not understand how I spent the first half-hour of my solitude; how I idly counted the stakes that formed

the framework of the hut, or watched with interest the artful tactics of another Shikaree, in the shape of a slippery-looking green lizard, who was cautiously "stalking" the insects among the rafters.

The cow, tired with struggling and plunging, appears to have become tolerably resigned to her situation, and has lain down, her ears, however, in continual motion, and the jaws sometimes suddenly arrested, while in the act of chewing the cud, to listen, as some slight noise in the thicket attracts her attention. Gracious! what is that down on the nullah to the left? A peacock only. How my heart beat at first! what a splendid train the fellow has! Here he comes, evidently for the water: and now his seraglio—one, two, four, five, buff-breasted, modest-looking little quakeresses. What a contrast to his splendid blue and gold! All to the water—dive in your bills and toss back your heads with blinking eyes as you quaff the delicious fluid; little do you dream that there is a gun within five paces, although you are quite safe. But stop! here are antics. The old boy is happy, and up goes his tail, to the admiration of his hens, and the extreme wonderment of the cow, who, with open eyes, is staring with all her might at the glories of the expanded fan; and now slowly goes he round and round, like a solemn Jack o' the Green, his spindle shanks looking disreputably thin in the waning light.

They quit the water-side, and disappear; and I can hear their heavy wings as they one after another mount a tall tree for the night.

The moon is up—all nature still; the cow, again on her legs, is restless, and evidently frightened. Oh! reader, even if you have the soul of a Shikaree, I despair of being able to convey in words a tithe of the sensations of that solitary vigil; a night like that is to be enjoyed but seldom—a red-letter day in one's existence.

Where is the man who has never experienced the poetic influence of a moonlit scene? Fancy, then, such a one as here described; a crescent of low hills—craggy, steep, and thickly wooded—around you on three sides, and above them, again, at twenty miles distance, the clear blue outline of the Neigherry Hills; in your front the silver-sand bed of the dry watercourse divides the thick and sombre jungle with a stream of light, till you lose it in the deep shadows at the foot of the hills—all quiet, all still, all bathed in the light of the moon, yourself the only man for miles to come; a solitary watcher, your only companion the poor cow, who, full of fears and suspicions at every leaf-fall, reminds you that a terrible struggle is about to take place within a few feet of your bed, and that there will be noise and confusion, when you must be cool and collected. Your little kennel would not be strong enough to resist a determined charge, and you are alone, if three good guns are not true friends.

Let me, good reader, give way to the pleasures of memory—let me fancy myself back again, seated in my dear little hut, full of hope and expectation, now drinking the ice-cold coffee from one of the soda-water bottles, re-corking it, and placing it slowly and noiselessly in its corner. Hark to the single ring of a silver bell, and its echo among the hills!—a spotted deer—why does she call! has she seen anything? Again, and again, and answered from a long distance! 'Tis very odd, that when one should be most watchful, there should be always an inclination to sleep. A raw nip of aqua-vitæ, and a little of the same rubbed

round the eyes, nostrils, and behind the ears, make us wakeful again.

Oh! that I could express sounds on paper as music is written in notes. No, reader, you must do as I have done—you must be placed in a similar situation, to hear and enjoy the terrible roar of a hungry tiger—not from afar off and listened for, but close at hand and unexpected. It was like an electric shock;—a moment ago, I was dozing off, and the cow, long since lain down, appeared asleep; that one roar had not died away among the hills when she had scrambled on her legs, and stood with elevated head, stiffened limbs, tail raised, and breath suspended, staring full of terror in the direction of the sound. As for the biped, with less noise and even more alacrity, he had grasped his favorite "Sam Noek," whose polished barrels just rested on the lower ledge of the little peep-hole; perhaps his eyes were as round as saucers, and heart beating fast and strong.

Now for the struggle;—pray Heaven that I am cool and calm, and do not fire in a hurry, for one shot will either lose or secure my well-earned prize.

There he is again! evidently in that rugged, stony watercourse which runs parallel, and about two hundred yards behind the hut. But what is that! Yes, lightning: two flashes in quick succession, and a cold stream of air is rustling through the half-withered leaves of my ambush. Taking a look to the rear, through an accidental opening among the leaves, it was plain that a storm, or, as it would be called at sea, a squall, was brewing. An arch of black cloud was approaching from the westward, and the rain descending gave it the appearance of a huge black comb, the teeth reaching to the earth. The moon, half obscured, showed a white mist as far as the rain had reached. Then was heard in the puffs of air the hissing of the distant but approaching down-pour: more lightning—then some large, heavy drops plashed on the roof, and it was raining cats and dogs.

How the scene was changed! Half-an-hour ago, solemn, and still, and wild, as nature rested, unpolluted, undefaced, unmarked by man—sleeping in the light of the moon, all was tranquillity; the civilized man lost his idiosyncrasy in its contemplation—forgot nation, pursuits, creed—he felt that he was nature's child, and adored the God of nature.

But the beautiful was now exchanged for the sublime, when that scene appeared lit up suddenly and awfully by lightning, which now momentarily exchanged a sheet of intensely dazzling blue light, with a darkness horrible to endure—a light which showed the many streams of water, which now appeared like ribbons over the smooth slabs of rock that lay on the slope of the hills, and gave a microscopic accuracy of outline to every object—exchanged as suddenly for a darkness which for the moment might be supposed the darkness of extinction—of utter annihilation—while the crash of thunder overhead rolled over the echoes of the hills, "I am the Lord thy God."

The hut, made in a hurry, was not thatched, (as it might have been,) and the half-dried foliage which covered it collected drops only to pour down continuous streams from the stem of every twig.

So much for sitting up for tigers! will most of my readers exclaim, and laugh at the monomaniac who would subject himself to such misery; but the thoroughbred Shikaree is game and staunch to the backbone, and will not be stopped by a night's

wetting. For myself, I can only say, in extenuation, that I was born on the 12th of August.

A heavy and continuous down-pour soon showed its effects, and although I had lots of big coats, and was not altogether unprepared for such an emergency, an hour had not elapsed before I was obliged to confess myself tolerably wet through. The mattress just collected the water and made a good hip-bath, for there was no other seat. The nullah, heretofore as I have described, was now a turbid stream of red water, which, falling over a slab of rock into the small basin before mentioned, kept up an unceasing din. Tired and disgusted, I rolled a doubled blanket, although saturated with water, tight round me, and was soon warm and asleep. About two o'clock in the morning the clouds broke and the rain ceased; the boiling stream ran down to half its size, and a concert of thousands of frogs, bass, tenor, and treble, kept up a monotonous croaking enough to wake the dead.

The moon appeared again, and I attacked both cold coffee and brandy, and made myself as comfortable as possible under existing circumstances—to wit, wringing the water out of my jacket and cap, and putting them on again warm and comparatively dry. The cow even shook herself, and appeared glad of the change of weather, and I had no doubt that she would go back with me to the tent in the morning, to gladden the eyes of her young calf and all good Hindoos. The nullah had run dry again, and even the infernal frogs, as if despairing of more rain, had ceased their din: damp and sleepy, with arms folded and eyes sometimes open, but often shut, I kept an indifferent watch, when the cow struggling on her legs and a choking groan brought me to my senses. There they were! No dream! A huge tiger holding her just behind the ears, shaking her like a fighting dog! By the doubtful light of a watery moon did I calmly and noiselessly run out the muzzle of my single J. Lang rifle.

I saw him, without quitting his grip of the cow's neck, leap over her back more than once—she sank to the earth, and he lifted her up again: at the first opportunity I pulled trigger—snick!—The rifle was withdrawn and big Sam Noek felt grateful to the touch. Left barrel—snick! Right barrel—snick, bang!

Whether hanging fire is an excuse or not, the tiger relinquished his hold, and in one bound was out of sight. The cow staggered for two or three seconds, fell with a heavy groan, and ceased to move. Tiger gone!—cow dead!—was it a dream! Killed the cow within five paces, and gone away scathless.

For a long time I felt benumbed: I had missed many near shots, even many at tigers, and some like this at night, but never before under such favorable circumstances. Why, I almost dreaded the morning, when my Shikaree and people would come and find the cow killed, and I should have in fairness to account for the rest. The first streak of daylight did shortly appear, and every familiar sound of awaking nature succeeded each other, from the receding hooting of the huge horned owl, to the noisy crowing of the jungle-cock and the call of the pea-fowl. The sun got up, and soon I heard, first doubtfully and then distinctly, the approach of my people. A sudden start, and stop, when they came in full view of the slaughtered cow; and then a look up and down the nullah, as if they had not seen all. The reader must spare me the recollection of a scene that vexes me even at this dis-

tance of time, as if it had occurred but yesterday. The next half-hour was spent sitting at the carcass of the cow, staring at the enormous and deeply indented prints of the tiger's feet, and looking with sorrow and vexation and some compunction at the poor little calf which had been driven back to its mother, neither to see her alive nor her death avenged.

It was quite evident that the tiger had not been hit, for there was neither hair nor blood to be seen, and one or two small branches in the jungle beyond the cow showed, either by being cut down or barked, that the ball had passed over the mark. So on to the pony and back to the tent to sleep or sulk out the next twelve hours.

Somehow or other that pony, generally so clever and pleasant, was inclined to kick his toes against every stone, and be perverse all the way home; at any rate I fancied so, and am ashamed to say that I gave him the spur or jerked the curb-rein on the slightest pretence. My people, like all Indians, read the case thoroughly, and trudged along without hazarding a remark on any subject. We passed under the identical banian-tree, and by the disgusting little black image described in the commencement of the story, and never did I feel more indignant against all idolatry, or more inclined to smash a Hindoo god. We also had to pass a small jungle village, and, as if on purpose, it appeared that every man, woman and child were posted to have a good look. Several of them, who knew some of my party, asked a hurried question, and I could hear, though I would not look, that the answer was given—"Had a shot, but missed." "Yes," said I to myself, "quite true—why should I be angry?" "Here goes the man that missed an animal as big as a bullock at ten paces—more power to his elbow!"

The tent gained, I was soon lying on my back on the bed kicking out my heels, calling for breakfast, and appearing to be very hungry, or very sleepy, or very anything but what I was—mortified and disgusted. Breakfast over, my good old Shikaree was sent for, and the whole affair gone over again. The rain, the unexpected time of night, and, above all, the two first shots *snicking*, and the third hanging fire being considered, we two being judge and jury, it was decided that not the slightest blame attached to the defendant, who was too well known as a very fine shot to regard a mistake of this kind; and, moreover, that as it was certain that the tiger was not hurt, but only frightened, there was strong reason for hoping that he would return at nightfall to the carcass. Men were therefore sent out to watch that the place should not in any way be disturbed, or the dead cow touched or moved; and I resigned myself to a pleasant sleep. I awoke about three in the afternoon; the guns had—thanks to a good Shikaree—been washed, dried, and slightly oiled, and were all laid on the table, looking as if a month of rain would not make them miss fire. A bath, clean clothes, guns loaded, pony saddled—and once more off to try my luck.

The pony was active and cheerful, and even the beastly image under the banian-tree did not look so grim. On our arrival at the ground, the half-wild fellows who had watched all day, dropped down from their trees, and reported that nothing had happened during the day, and that the place had been undisturbed. A few vultures had appeared about midday and settled on the carcass, but had been driven off: further they had nothing to say.

They were referred to the tent for payment for their day's work, and in due course took their departure with my people.

Once more left alone!—this time quite alone, for my poor companion of last night lay stiff and stark in the position I saw her fall, when the tiger relinquished his hold.

Alarmed by the already slightly smelling carrion, or finding water elsewhere, left by the downfall of last night, no peaceful or other living thing paid me a visit, if I except some few crows, who with heavy wings swept past, or perched on neighboring trees, cawing, and winking their eyes, and peering cautiously and inquisitively at the dead cow. Only one among the crew hovered and lighted on the dead beast's head; but although he made several picks at the lips and eyes, opening and shutting his wings the while on his strong, sleek, wiry-looking body, and cawing lustily, nobody heeded him; so, appearing to be alarmed at being solus in the scene, he took his departure.

Night succeeded day, and the moon, in unclouded beauty, made the dark jungle a fairy scene. There was but one drawback—the cow lay dead, the tiger had been fired at, and experience whispered, "the opportunity has gone by."

By-and-by a jackal passed like a shadow among the bushes, so small-looking, so much the color of all around, that it remained a doubt: more of these passed to and fro, and then a bolder ventured on the plain and sand, and up to the rump of the dead beast, took two or three hard tugging bites, and was gone. As the night grew later they became less fearful, and half-a-dozen of them together were tugging and tearing, till, breaking the entrails, the gas escaped in a loud rumbling, which dispersed my friends among the bushes in a moment; but they were almost immediately back, and the confidence with which they went to work convinced me that my hope was hopeless.

It must have been eleven o'clock when my ears caught the echo among the rocks, and then the distant roar—nearer—nearer—nearer; and oh, joy!—answered. Tiger and tigress!—above all hope—coming to recompense me for hundreds of night-watchings—to balance a long account of weary nights in the silent jungle, in platforms on trees, in huts of leaf and bramble, and in damp pits on the water's edge—all bootless;—coming—coming—nearer and nearer.

Music nor words, dear reader, can stand me in my stead to convey the sound to you: the first note like the trumpet of a peacock, and the rest of the deepest-toned thunder. Stones and gravel rattled just behind the hut on the path by which we came and went, and a heavy step passed and descended the slope into the nullah. I heard the sand crunching under his weight before I dared look. A little peep. Oh, heavens! looming in the moonlight, there he stood, long, sleek as satin, and lashing his tail—he stood stationary, smelling the slaughtered cow. No longer the cautious, creeping tiger, I felt how awful a brute he was to offend. I remembered how he had worried a strong cow in half a minute, and that with his weight alone my poor rickety little citadel would fall to pieces. As if the excitement of the moment was insufficient, the monster, gazing down the dry watercourse, caught sight of his companion, who, advancing 'up the bed of the nullah, stood irresolutely about twenty yards off. A terrific growl from him, answered not loud but deeply, and I was the strange but unsuspected witness to a catawaul-

ing which defies description—a monstrous burlesque on those concerts of tigers in miniature which are occasionally got up on a cold, clear night, in some of the squares in London, when all the cats for half a mile round get by some queer accident into one area.

Whether it is an axiom among tigers that possession is nine points of the law, or the other monster was the weaker vessel, I know not, but I soon perceived that as *my* friend made more noise, the other became more subdued, and finally left the field, and retired growling among the bushes. The bully, who was evidently the male, after smelling at the head, came round the carcass, making a sort of complacent purring—"humming a kind of animal song," and to it he went tooth and nail. As he stood with his two fore feet on the haunch, while he tugged and tore out a beef-steak, I once more grasped old "Sam Nock," and ran the muzzle out of the little port. The white linen band marked a line behind his shoulders, and rather low, but from the continued motion of his body, it was some moments before eye and finger agreed to pull trigger—bang! A shower of sand rattled on the dry leaves, and a roar of rage and pain satisfied me, even before the white smoke which hung in the still air had cleared away, to show the huge monster writhing and plunging where he had fallen. Either directed by the fire, or by some slight noise made in the agitation of the moment, he saw me, and, with a hideous yell, scrambled up: the roaring thunder of his voice filled the valley, and the echoes among the hills answered it, with the hootings of tribes of monkeys, who, scared out of sleep, sought the highest branches, at the sound of the well-known voice of the tyrant of the jungle. I immediately perceived, to my great joy, that his hind quarters were paralyzed and useless, and that all danger was out of the question. He sank down again on his elbows, and, as he rested his now powerless limbs, I saw the blood welling out of a wound in the loins, as it shone in the moonlight, and trickled off his sleek-painted hide, like globules of quicksilver. As I looked into his countenance, I saw all the devil alive there. The will remained—the power only had gone. It was a sight never

to be forgotten. With head raised to the full stretch of his neck, he glared at me with an expression of such malignity, that it almost made me quail. I thought of the native superstition of singeing off the whiskers of the newly-killed tiger to lay his spirit, and no longer wondered at it. With ears back, and mouth bleeding, he growled and roared in fitful uncertainty, as if he were trying, but unable, to measure the extent of the force that had laid him low.

Motionless myself, provocation ceased, and, without further attempt to get on his legs, he continued to gaze on me; when I slowly lowered my head to the sight, and again pulled the trigger. This time, true to the mark, the ball entered just above the breast-bone, and the smoke cleared off with his death-groan. There he lay, foot to foot with his victim of last night, motionless—dead. My first impulse was to tear down the door behind, and get a thorough view of his proportions; but remembering that his companion the tigress had only vanished a short time ago close to the scene of action, I thought it as well to remain where I was; so, enlarging the windows with my hands, I took a long look, and then jovially attacked the coffee and brandy bottles, without reference to noise, and fell back on the mattress to sleep, or to think the night's work over. "At last, I have got him, his skin will be pegged out to-morrow, drying before the tent door." When my people came in the morning, they found me seated on the dead tiger. Coolies were sent for to carry the beast, and I gave the pony his reins all the way back to the tent.

After breakfast, the sound of tom-toms and barbarous music greeted our ears; for the Gooroo and half the little village had turned out, and were bringing in the tiger like an Irish funeral. I had a chair brought out, and under the shade of a fine tree superintended the skinning of the tiger; and as I had had no sleep for the last two nights, I determined to make a holiday. Dined at half-past six, and had a bottle of *Frederick Giesler*, and the fumes of his glorious champagne inspired me: "The first rainy day, I will put last-night's adventure on paper, and send it home to my old friend, Regina."

From the National Era.  
IN PACE.

A TRACK of moonlight on a quiet lake,  
Whose small waves on a silver sanded shore  
Whisper of peace, and with the low winds make  
Such harmonies, as keep the woods awake  
And listening all night long for their sweet sake.  
A green-waved slope of meadow, hovered o'er  
By angel troops of lilies, swaying light  
On viewless stems, with folded wings of white.  
A slumbrous stretch of mountain-land, far-seen,  
Where the low westering day, with gold and green,  
Purple and amber, softly blended, fills  
The wooded vales, and melts among the hills.  
A vine-fringed river, winding to its rest  
On the calm bosom of a stormless sea,  
Bearing alike upon its placid breast,  
With earthly flowers and heavenly stars impressed,  
The hues of time and of eternity:—

Such are the pictures which the thought of thee,  
Oh friend, awakeneth, charming the keen pain  
Of thy departure, and our sense of loss  
Requiting with the fulness of thy gain.  
Lo! on the quiet grave thy life-borne cross,  
Dropped only at its side, methinks doth shine,  
Of thy beatitude the radiant sign!  
No sob of grief no wild lament be there,  
To break the sabbath of the holy air,  
But, in their stead, the silent breathing prayer  
Of hearts still waiting for a rest like thine.  
Oh, spirit redeemed! forgive us if henceforth  
With sweet and pure similitudes of earth  
We keep the pleasant memory freshly green,  
Of love's inheritance a priceless part,  
Which Fancy's self, in reverent awe, is seen  
To paint, forgetful of the tricks of art,  
With pencil dipped alone in colors of the heart!

J. G. W.

From Chambers' Tracts for the People.

## THE TEMPTATION.

## I.

THE moon was shining brightly over the beautiful vale of Taunton, and the simple inhabitants of the neighboring cottages were sleeping soundly in their beds, when young Vincent Halloway crept out of his. He had no toilet to make, for he had lain down in his clothes, in order to deceive the vigilance of his father—a substantial farmer, but a severe man and a rigid religionist, who made it a rule never to rest his own head on the pillow till he had seen his son's disposed of in the same way; for, as he said, "he knew what lads were, and how ready they are to get into mischief; and there was nothing like looking well after them!" When his less strict friends laughed, and told him that youth would be youth in spite of him, and that, do what he would, Vincent would be like other young men by and by, he answered by quoting Solomon's proverb of "Train up a child in the way it should go;" and declaring, that if his son did go wrong, it should not be through any neglect of his. Come what might hereafter, he would have nothing to answer for. So, in consequence of this determination, Vincent, though now nearly two-and-twenty years of age, was permitted to attend neither fair nor market, neither junketings nor cricket-matches; and, though he had had a good education, was seldom allowed anything to read except Bunyan and the Bible, and the "Whole Duty of Man." Under these circumstances it was impossible to enjoy the intimacy of any of the young people of the village; for during the daytime he was kept pretty closely employed in the superintendence of his father's farm, and when work was done, he was expected to be present at supper and prayers; whilst, on Sundays, church and his religious studies and examinations occupied every hour of the day. It may be presumed, therefore, that Vincent's life was not a very cheerful one, nor is it at all surprising that he should rebel in spirit against this rigid domination. Many a lad would have done more—broken out into open mutiny, or become a hypocrite, and sought compensation in secret dissipations. But though Vincent often writhed and fretted, his temper was not sufficiently excitable to drive him easily into either of these extremities. Added to which he was naturally ingenuous, and stood greatly in awe of his father—a man whom it was not easy to defy. His love for his mother also helped to keep him in the straight but narrow path he was condemned to—an indulgent, gentle woman, adoring her son and fearing her husband; and who always entreated him, for her sake as well as his own, to yield to an authority she would have thought it both sinful and impossible to resist.

The only friend Vincent had was Joe Jebb, the son of the blacksmith of the village, whose forge at the extremity of it he necessarily passed several times in the course of the day, and where he generally contrived to solace himself with a little gossip, and hear of those sports and pastimes he was not allowed to partake of. It unfortunately happened that Joe was not the best companion for him in the world; but, in the first place, he had no choice, and, in the second, he had necessarily little discernment. He knew that his father did not like Joe; but who did he like that was not as stiff and rigid as himself? His reprobation, in his son's opinion, proved nothing against Joe—it only

put Vincent on his guard to conceal their intimacy. When Jacob Halloway was in sight, Vincent passed the forge with a cold nod of recognition; and though many a one had seen him chatting and laughing there, nobody would have "told tales of the poor lad whose father treated him so harshly."

This acquaintance had lasted some time without leading to any consequences; but the time was come that Vincent wanted a helping hand in a matter Joe could manage better than anybody else, and now Vincent congratulated himself on having so serviceable a friend.

The merriest season in the year, indeed the only merry season poor Vincent had, was the harvest-time. There was the fun in the fields, when the father was too busy to have his eye always on him; the carrying, and the supper the old man was obliged to give, whether he would or not, with the light-hearted lads and lasses that had come to help at the reaping. But of all the harvest-homes Vincent had yet enjoyed, the last had been rendered the pleasantest by the bright black eyes and rosy cheeks of Bessy Mure, the daughter of a poor widow who had not been long an inhabitant of the village. It was quite a new sensation to Vincent when he found his heart begin to stir whenever he caught sight of Bessy's lithe figure, and the blood rushed through his veins like wildfire if, in binding up the sheaves, their fingers came in contact. Then Bessy would blush, and withdraw her little hand; and when she gave him one of her roguish smiles—for she was a merry creature—her teeth shone like Oriental pearls. Often when Vincent went home he did not know whether he was walking on his head or his heels; and, instead of sleeping all night till his father roused him from his unwilling bed in the morning, he lay awake in a sort of ecstasy through the still hours, and delighted the old man by hastening to the field with the earliest dawn of light, so that, Jacob observed, it was clear to him that Vincent was getting to be an industrious lad, and to like his work.

It was about three weeks after this harvest-home, when the bright September moon was shining in the clear heavens, that Vincent crept out of bed, as we have said above, and, after lifting a corner of the white muslin curtain that shaded the lattice, either to take a peep at the night, or to see if the coast was clear, advanced on tiptoe to the door of his room, and gently, gently opened it. It was a provoking door, for it would creak, although he had that evening stolen a bit of butter from the tea-table and carefully greased the hinges. Yes, it creaked still, and Vincent set his teeth and grinned with anxiety and vexation, for his father and mother lay in the adjoining room, with the key of the house-door under their pillow. But they slept the heavy sleep of toil; for though well to do in the world, they worked on as they had done when they began life, and as if the name of Jacob Halloway was not inscribed in the ledgers of Threadneedle-street.

They slept, and on crept Vincent stealthily, down the stairs to the front door, which was bolted and locked; but he had a key in his pocket that Joe had made for him after the exact pattern of the one on which old Jacob was sleeping above so soundly. It was a ticklish thing to draw back those heavy bolts and turn that large key, and Vincent paused between each operation to breathe and listen. But all was still above; and he opened the door, and felt the fresh air of the night blowing

on his face, and, stepping out, he gently closed it. Then how his heart bounded with delight! It was his first assignation—his first midnight meeting with Bessy; he was going to see her face to face for the first time without witnesses. Since the reaping and the harvest-supper, they had met on the high road and in the fields—meetings contrived by one or the other; but momentary, constrained, and perilous—and so unsatisfactory! There was no bearing it, and one day Vincent said so; and that once, just once, Bessy must meet him where he could see her alone for a few minutes. He had so much to say! And Bessy promised, and Joe made the key; and now Vincent is striding to the haven of his bliss over ditch and dike, instead of through the village, in order to keep clear of the neighbors' cottages, watchdogs, and wakeful eyes.

Bessy had fewer difficulties in her way. Her mother, simple and fond, suspected nothing; and her youngest daughter Nancy, who slept with her, had not yet dreamed of lovers' midnight meetings. Bessy lay in a little room alone, and it was easy to slip down stairs with her shoeless feet, and let herself out. She had not far to go, and she was first at the rendezvous; for Vincent had not dared to stir till his parents had been long enough in bed to afford a reasonable hope that they might have fallen asleep.

Who shall paint such a first meeting! A boy and girl, little better—in the bloom and vigor of health and freshness, and of eager, unconscious passion! Discourse there was none; only exclamations and interjections, and wishings, wishings, wishings that Bessy were but his own forever—his dear, dear little wife, as assuredly one day she should be! And to insure this blessed consummation, and defend them from all the perils of accident or change, what vows were demanded, what promises given!

But wherefore record them? How often has the moon listened to such vows and wishes! How often seen the vows broken and turned into curses, or the wishes realized to the hopeless misery of the wisher!

But in the mean time, whilst the intoxication lasts, and the heart beats high, and the eyes dance, and the ground we tread upon seems air, the unforeseeing visionaries are blest. They are off the earth; they have inhaled the ethereal breath of love, and are away, floating in far regions which the sober dwellers on the planet dream not of. They are dancing with the stars, carousing with the moon; they are robed in sunbeams, bathed in the perfume of the sweetest flowers; they are men no more, but gods!

But then come the dregs of this inebriating cup; and they, alas! are poison.

And so these young lovers met again and again; and it would have been curious to observe the gradual influence of such stolen interviews on their characters; how Bessy was at first anxious and conscious, and yet with an indescribable expression of happiness in her girlish countenance; how she cared less for her former companions and their sports; how she liked to sit musing on a stile, her eyes following the pasturing sheep, that yet she saw not; how she sometimes smiled at her own pleasant thoughts; how she blushed and pretended not to hear when Vincent's name was mentioned; and how, when the young girls of the village remarked how handsome he was, and how beautifully his brown hair curled over his forehead, and how he looked in his Sunday clothes as genteel as

the squire, she would laugh, and say, for her part, she saw nothing particular in him. This was at first. By and by she grew less thoughtful, less fond of solitude, and her blushes were not so near her cheeks; and when any of the young people hazarded a jest about Vincent—for slight suspicions of what was going on were beginning to arise—she grew angry; and exclaimed, "What nonsense!" and recommended them to mind their own business, and it would be all the better for them. The expression of her features changed too somewhat; she no longer looked so very young. Her face became the face of a woman; before, it had been almost that of a child.

Vincent changed too. At first he was dreamy and absent, but evidently much happier and more contented than he had previously been; but Joe Jebb soon got hold of his secret, and quizzed him about it unmercifully. The key of course had suggested something like truth to Joe's experienced mind, and determined to find out who the damsel was who had inspired the milksop, as he called him, with so much boldness, he watched and discovered. When he taxed Vincent with it, and laughed at him, the young lover looked quite shy, and blushed like a girl; but by and by his delicacy grew less susceptible, and he could laugh too. This was a bad sign for poor Bessy. However, he became more of a man, less boyish, timid, and obedient. The young girls of the village thought him much improved; his mother grew prouder of him; but his father said he was afraid Vincent would require "a tight hand and a sharp eye yet."

In process of time the key that Joe Jebb had made was not always used for the same purpose. The meetings with Bessy continued, but they were less frequent; and sometimes, on other evenings, Vincent would slip out to spend a few hours of conviviality with the lads of the village. Still, these later hours were harmlessly enough spent. The worst part of them was the habit of concealment they engendered; but for that he could scarcely be blamed. Where the legitimate pleasures of youth are denied, they are not the less desired; and it is demanding a greater sacrifice of another's will and inclinations to our own than we are entitled to, when we insist that they should be relinquished in compliance with our opinions and prejudices.

Well, the winter, spring and summer had come and gone, and it was harvest-time again; but by this time things were greatly changed. Bessy consorted no more with her young companions; the rosy cheek was pale and thin; the light step heavy, and the bright eye dim; whilst Vincent seemed more thoughtful and less alert than usual. They addressed each other seldom; and instead of contriving, as on the previous year, to work always near each other, they were together or apart just as chance directed. Last season Bessy had been the prettiest and merriest girl at the supper, and had sung the best song; now she was the gravest; and as her beauty had been much augmented by her gayety and freshness, there were now others prettier than she. All who had known her before saw the change, and some said Bessy Mure was going into a decline. Others looked for another cause; but old Jacob surmised nothing; for his son paid her no attentions; they did not even sit at the same table.

## II.

The month of September was come, and the evenings were getting dark and chill. Elizabeth

Mure and her elder daughter were sitting in the dusk, with no light but what gleamed up fitfully from the bit of fire on the hearth. Formerly Bessy used to say: "Oh, mother, let's get a light; it's so moping to sit in the dark so!" But Bessy did not mind moping now; she no longer wearied of doing nothing, but stared into the fire with a vacant gaze; and she could sit still with her hands before her an hour at a time without stirring or speaking. The mother was as silent as the daughter—neither uttered a word. By and by Nancy, who had been going in and out with the restlessness of childhood—for she was little more than twelve years of age—came running in with a letter, which a neighbor, who had been to Taunton market, had just brought.

"John Stokes says that he saw Uncle Philpots at the market, mother, and that he's a-coming over here to see us."

"Did he say so?" said Bessy.

"He told John Stokes so," answered Nancy. "I'm so glad! I wonder if Aunt Philpots'll come too."

"When's he coming?" inquired Mrs. Mure.

"I believe to-morrow; but he did not say when," answered Nancy. "Perhaps the letter tells. Shall I get a light, mother?"

"Do, child," said Mrs. Mure, turning the letter from side to side, and examining it by the light of the fire.

People who have letters every day, often more than they want, have no respect for them; they tear them open rashly, and force themselves into their confidence without the slightest delicacy or scruple; but it is quite a different matter with those who only get one now and then. They never attempt to penetrate into the interior till they have familiarized themselves with the physiognomy of the stranger. With them wonder seems to take precedence of curiosity; and they can postpone their desire to learn the contents of a letter till they have made out the half-effaced post-mark, or deciphered the motto on the dab of wax.

When Elizabeth Mure had turned the letter from side to side a dozen times, and held it to the light in every possible position, she at length broke the seal and began to decipher its contents, whilst Nancy looked over her shoulder in a state of eager excitement.

"Does uncle say he's coming, mother?" asked Bessy.

"Yes; the letter says he will be here to-morrow."

"And is aunt coming too?"

"He don't say," answered Mrs. Mure. But presently observing the letters T. O. at the bottom of the page, she turned the leaf and read the following postscript: "P. S.—My old woman says she must come along with me, so I suppose I must let her have her way."

"Oh, I'm so glad!" cried Nancy, jumping for joy. "Ain't you glad, Bessy?"

"What should I be glad for?" said Bessy.

"Cause uncle and aunt's coming!" answered Nancy.

"Pooh!" said Bessy.

"La! Bessy, you're so cross getting—you're never glad at nothing!"

"I wish, mother, you'd send Nancy to bed. I'm sure it's past nine!"

"I shan't go to bed for you!" said Nancy, far from pleased at the suggestion.

"Go into neighbor Wrightsore's a bit, Nance,

and see how she is. I heard she'd got the rheumatics," said Mrs. Mure.

"Very well! I know you want me to go away, that Bessy and you may talk secrets about—I know who!" said Nancy, ready enough to go nevertheless.

"I wish aunt was n't coming!" said Bessy. "I would n't have minded uncle, but aunt's so prying."

"It's my opinion, Bessy," said Mrs. Mure, "that my brother Philpots would be the best to advise us, and that we'd as good tell him all about it."

"Oh, mother! how can you say so!" cried Bessy. "I'm as certain as I'm sitting here, that if you do he'll go and tell old Mr. Halloway."

"Well, let him!" answered her mother; "it's no more than that young scapegrace deserves!"

"Very well, mother," said Bessy fretfully; "I see you'll just be the ruin of us, you're so obstinate."

"I'm no such thing, Bessy," said Elizabeth, who was the most gentle and least obstinate of mortals; "and I'm sure if I only thought that he'd make it all right by and by!"

"And don't he say he will, mother! and hav'n't I got his hand of write upon it? What can he do more? He says it's just as binding as if he'd been to church with me."

"There's no saying," answered Mrs. Mure. "Some says a bit of paper's binding in law, and some says it is n't; but no doubt my brother Philpots could tell."

But poor Bessy would have preferred remaining in ignorance rather than apply to Uncle Philpots for information. She had not only her honest shame to contend with, but she dreaded his reproof, and still more that of his wife; and she looked upon their visit as most unfortunate and ill-timed.

On the following morning she contrived to waylay Vincent, and make known to him the impending danger.

"How unlucky!" said he; "but can't you make your mother hold her tongue?"

"But even if I could, it would n't be of no use I'm afraid; for Aunt Philpots is such a ferret, there's no hiding nothing from her."

It was a terrible crisis; for although Vincent had certainly gained some confidence, and in a slight degree emancipated himself, yet the idea of his rigid father's becoming acquainted with this unfortunate connection, and consequently with the extent to which he had been deceiving him for the last twelvemonth, filled him with terror. Then there were other considerations to boot. He apprehended that his father, being a just and religious man, might perchance insist on his "making Bessy an honest woman" by marrying her; and Vincent did not want to marry Bessy. He wished her no ill, but he would have been very well content never to see her face again. The *mirage* in which passion had enveloped her had disappeared, and he saw her as she was—an uneducated, ignorant peasant girl, who had been pretty from her youth and freshness, but whose beauty indisposition and anxiety were beginning already to fade. He did not even do her justice; for she was in reality still pretty, and to many an eye would have been interesting; but poor Bessy had no more charms for Vincent Halloway. Added to all this, some new lights were beginning to dawn upon him—new ideas of life and the world. These events occurred at the period when all England was astir about Reform; and to the surprise of everybody, old Jacob came out quite

in a new character. He was found to have strong opinions on the subject, and, roused by the conflict, he not only attended several public meetings at Taunton himself, but he had taken his son with him, in order to add a unit to the party, and to indoctrinate the young man with right views. And Vincent was delighted; not that he cared much about the question they were agitating; indeed, to say the truth, he had rather obscure notions as to the advantages that were to accrue to the king's lieges from the proposed alterations, but he perfectly understood the pleasure of finding himself, for the first time in his life, of some importance, as the only son of a man that farmed a good many acres; he liked the bustle and the crowd, and the thronged streets, and the ribbons and banners, and processions and bands of music; and, above all, he was in a state of great excitement at the prospect of a ball which was to be given at the Castle Inn by the Reformers, and to which most unexpectedly Jacob, in the glow of his patriotism, had consented he should go, at the entreaty of Mr. Halkelt, the silk-mercier, who represented in lively colors the necessity of showing that they could muster stronger than their adversaries. Vincent had been present when this discussion took place, and Miss Emily Halkelt, the mercer's only daughter, was present too, looking very much as if she thought it would be a sin and a shame to keep so handsome a young man as Vincent Halloway from the ball. Jacob said, with a grim sort of merriment, that he was afraid his son would n't be of much use there, for he did n't think the boy knew the use of his legs; but Vincent, who could not submit to such an imputation before the young lady, assured his father he was mistaken. The fact was, though allowed no lessons, he had picked up a notion of dancing at school when the other boys took theirs, and in the course of the last year he had found several opportunities of bettering his instruction.

Emily Halkelt was not only a very handsome and amiable girl, but she was really a superior one; possessing the manners and appearance of a gentlewoman, together with good sense and a good education. She was even, to a certain degree, accomplished; for she played the piano-forte, and sang very agreeably, danced well, and knew something of French. When Vincent ventured to assert that he was not so ill-qualified for a ball as his father had supposed, adding, however, that he had had very little practice in the art of dancing, the hospitable silk-mercier invited him to come on the following Wednesday evening to his house. "It will be my daughter's birthday," he said, "and we have a parcel of girls and boys coming to make merry; and, as I daresay they'll strike up a hop to the piano, you'll have an opportunity of getting into training for the ball at the castle."

It was two days subsequent to this invitation, and just when Vincent was in the flutter and excitement of expectation, that poor Bessy waylaid him with her wan, anxious face, to tell him of Uncle Philpots and his unlucky visit. How welcome such a piece of intelligence was, and how far he was disposed to sympathize with and soothe her, may be conceived.

However, it was necessary to keep Uncle Philpots quiet; and when Bessy suggested that her only hope of doing so lay in *the bit of paper*, Vincent consented to her showing it him; but not without a dreadful twinge of remorse; for he knew in his heart that however sincere he might have been when in the flood and whirlwind of passion he gave it her, he had now no intention of fulfilling the vow

it recorded; and he felt ashamed and conscience-stricken when he saw how undoubtedly the too-confiding Bessy relied on his *hand of writ*, as she called it. But there was no other way of staving off the threatened danger but by leaving her in delusion, and allowing Philpots to fall into it also if he would.

This rencontre with Bessy dashed Vincent's spirits considerably. He had for some time, under the influence of his growing indifference, been accustoming himself to think lightly of the affair, and to comfort himself with the belief that time and a little management would extricate him from the embarrassment—the more especially as the mother was such a good, easy soul. But Uncle Philpots, by Bessy's account, might prove a very different person to deal with; and besides the other dreaded consequences of the disclosure, if it came now, there would be an end of all these new delights: the frequent excursions to Taunton, the parties and the balls, and the hope of dancing with the fascinating Miss Emily Halkelt.

Bessy, who was in no hurry to meet the curious eyes of Aunt Philpots, contrived to be out of the way when the visitors arrived; and, in answer to their inquiries, Mrs. Mure said she'd "be in presently; but Bessy had n't been very well of late;" but in spite of herself, for she did not intend to convey any hint of the truth, there was a sort of significance in her manner of making the announcement that set the acute wits of Aunt Philpots on the alert at once. Once on the right track, she was not long of arriving at the fatal secret.

In the mean while her spouse, Joss Philpots, as his familiars called him, all unsuspecting of poor Bessy's misfortune, was in tip-top spirits—glad to see his sister and his niece, and in high good-humor regarding a little business he had done at Taunton market the day before. His private opinion was that "his old woman was in her tantrums," and he intimated as much to the girls by sundry knowing nods and winks; whilst he excruciated Bessy by asking her if it was not love that made her eyes so hollow and her cheek so pale. So passed the first afternoon, Bessy seeing clearly by the demeanor of her aunt that she was suspected if not betrayed, and dreading what was to follow. When nine o'clock came, Joss, an ale-fed keeper of a little roadside public-house, grew sleepy, and went to bed leaving his wife below, who shortly afterwards recommended the girls to follow his example.

"Go away to bed, Nance—all little girls should be in bed before nine o'clock; and as for you, Miss Bessy, you're more fit for that place than any other, I take it, just now; besides, I want to talk over a few matters with your mother before I go up to my old man."

Poor Bessy! as she closed the door upon them, and crept up stairs, she knew full well what the talk was to be about; and whilst Nancy was rattling on about Uncle and Aunt Philpots, and how they had invited her to go and see them, she was straining her ears to catch the tones of the speakers below but they discoursed in whispers, and no sound reached her till, after the lapse of an hour and a half, her mother, who had relinquished her own room to her visitors, came up to bed. Nancy was asleep by this time, and Bessy could ask if Aunt Philpots had "found out, and what she said." Mrs. Mure answered that she was in a mortal way about it, and that she had no doubt Philpots would have Mr. Halloway up before the magistrate the next day.

"But did you tell her that I'd got his hand of write, mother?"

"Yes, sure I did; but she said she did n't know whether it was good in law or not."

Bessy never slept that night, and soon after the day began to dawn she heard her aunt's voice pouring into Joss' sleepy ear the unwelcome tidings. She had made several vain attempts to rouse him to a comprehension of it when she went to bed; but she might as well have whispered it to the bedpost. In the morning, however, he was more impressionable; and he no sooner understood what was the matter, than he became brisk enough.

Warm-hearted and hot-headed, he was just the man to take up such a ravelled skein by the wrong end; and when he entered the kitchen where Bessy was helping her mother to prepare the breakfast, whilst Nance was gone to fetch the milk, his face was red and his eyes bloodshot with anger and indignation—not against Bessy, of whom he was exceedingly fond, and whom he rather pitied than blamed, but against that young jackanapes, as he called Vincent, who, he swore, should marry her before he was many days older, or he'd know the reason why.

"Tell uncle about the bit of paper, mother!" whispered Bessy.

But Joss snapped his fingers, exclaiming, "It was n't worth that!" whilst Mrs. Philpots nodding her head, said, "A pretty business you've made of it, Miss Bessy!"

When the breakfast was over, to which, by the by, Uncle Philpots, in spite of his indignation, did ample justice—eating and drinking with an air of spiteful determination, as if he was resolved to be revenged on the bread and butter till he could get at the real delinquent—he shoved back his chair and rose; buttoned his coat to the chin, clapped his hat firmly upon his head, clutched his walking-stick, and moved with a resolute step to the door. Bessy guessed his intention—he was going to Jacob Halloway to impeach his son, and demand reparation. At the last moment, just as he was closing the door, she flew after him, and caught him by the skirts of his coat; "Oh, uncle, don't!" she sobbed; "for my sake don't!"

"Don't what?" said Joss, turning round and striking the ground with his stick.

"I know what you're going to do, uncle, but you'll only make it worse. If you'll leave Vincent alone, it will all come right—indeed it will. If the bit of paper ain't good in law, he'll keep to it all the same; he told me he would only yesterday."

"Will keep to it! He *shall* keep to it!" cried Uncle Philpots with another thump of his stick.

"They can all promise fast enough to get their ends!" said Mrs. Philpots; "but catch 'em keeping to it." Upon which remark Joss, planting his stick once more in the earth, turned resolutely to the door.

"Let me go with you, uncle!" said Bessy, hanging herself upon his arm as he stepped out and closed the door behind him. "If you'd just see him first, uncle!" she began in a coaxing tone.

"See who?" asked Uncle Philpots sternly.

"Vincent—young Mr. Halloway—I'm sure he'd satisfy you about it."

"Young blackguard!" exclaimed he.

"But, uncle, it was just as much my fault as it was his'n," said Bessy, with the generosity that

under such circumstances so seldom deserts a woman.

"You know, Bessy, you was always my favorite niece," said Joss; "and it's my place to be a father to you as hav'n't got none of your own; and would it be like a father if I was to see you ruined for life, and never see justice done you?"

"But suppose, uncle, Mr. Vincent was to say he'd do the justice to me! Suppose you heard him say so yourself! This way please, uncle!" said Bessy, conducting Joss by a side-path where she had promised to meet Vincent that morning in order to communicate the result of Uncle Philpot's visit.

When the young man got a glimpse of her companion—for he readily guessed who the ruddy-faced stranger was—he turned sharp round, hoping to avoid so disagreeable an interview; but Bessy ran after him, and having hastily indoctrinated him with the best way to appease the wrath of her uncle, he returned.

"Be sure say you look upon the bit of paper as good as if Mr. Winstanley had said the words over us in the church," said Bessy; and Vincent did say so; and when he was in for it, a great deal more. Uncle Philpots was resolute, and kept him to the point; and, to stave off the immediate peril, Vincent promised and swore all that was demanded of him. He only made one condition, and that was, that he should be allowed a little time to bring round his father, who might, if too hastily informed of his proposed marriage, turn him and his young wife out of doors without a penny to keep them from starving; and Uncle Philpots yielded, and Bessy believed.

### III.

Kind as Uncle Philpots was, Bessy Mure was very glad when he was gone, whilst Vincent Halloway heartily wished he might never see his face again; his thoughts being just then divided betwixt schemes for evading the fulfilment of an engagement now become odious to him, and the charms of Miss Emily Halkelt. He had been to the party at her father's house, and danced with her; and he had heard her sing and play, and had come away intoxicated with love. He was pervaded with a very different feeling now from that which his first passion had inspired. It had never occurred to him that Bessy was anything but a woman, but Emily Halkelt was an angel! He wondered how he could ever have cared for Bessy—an ignorant peasant-girl, who could scarcely speak her own language or read a page in the New Testament; and he recoiled with horror and disgust from the idea of making such a woman his wife; whilst Emily, who really merited the admiration he bestowed on her, added fuel to the flame she inspired by all the encouragement a modest young girl could give. As we have implied, Vincent's personal endowments were rather remarkable. He had handsome straight features that would not have disgraced a scion of the aristocracy, a full dark eye, fine teeth, and an exceedingly well-formed figure. Neither were his manners clownish, as might have been expected from the forced retirement in which he had lived. Timid and shy he was; but there was a certain natural grace about his movements that redeemed any little awkwardness consequent on his want of knowledge of society, and which, combined with his good looks, and the fact of his having a harsh father, rendered him

that very dangerous character to susceptible hearts—"an exceedingly interesting young man;" and when the fair Emily read in those expressive eyes the love which the lips durst not reveal, she fearlessly opened her bosom to the charms. She knew of no reason why she should not. There was no inequality of condition; her lover's father and her own were on terms of cordiality, and Vincent's reputation was unimpeached—the knowledge of his unfortunate connection with Bessy Mure not having extended beyond the humble villagers of the neighborhood. Indeed, Mr. Halkelt himself, who conceived that the only son of so rigid a father must be a model of virtue, and who was well aware that old Jacob's coffers were not ill lined, gave every encouragement to the intimacy between the young people by throwing his doors open to Vincent whenever he liked to come; whilst Jacob, whose preparations for the next world had not taught him to despise the goods of this, if he did not give his countenance at least shut his eyes to the fast growing intimacy at the silk-mercier's.

Meantime, whilst Vincent was revelling in his new life—a life of ecstatic happiness but for the one dark spot that threw its gloomy shadow over every joy—poor Bessy's hour of trial was drawing nigh. He seldom saw her now, at least as seldom as he could. Business, he told her, took him much from home—business connected with the Reform Bill, that was expected to pass in the ensuing session; and Bessy thought it would be a fine thing to have a husband that was dressed like the squire, and rode to Taunton on a "high trotting horse" about such grand matters; for that he would ultimately make her his wife she still believed in spite of his growing neglect, never having been able to divest herself of the superstitious regard entertained by many simple, ignorant people for "the bit of paper with his hand write upon it." To a more delicate and susceptible mind his coldness would have been agonizing, awakening the worst fears and suspicions; but Bessy's was not of this sort. When she discovered her own situation, and the consequences of their intimacy, she was both ashamed and alarmed. Misdemeanors of the kind were rare in the village, the vicar having taken great pains to impress a more healthy tone on the morals of his flock; so that she dreaded the exposure and reproof that awaited her, whilst the idea of the indignation of Uncle Philpots and the wrath of old Mr. Halloway was terrific. But Uncle Philpots being quieted, and the promise of marriage reiterated to him, her mind was pretty well at ease for the present; especially as, whenever she interrogated Vincent regarding the progress of affairs, he always appeased her by the assurance that his father "was coming round, but that they must not hurry him, as he was naturally a good deal disappointed at his son's making such a match;" and when Uncle Philpots wrote to inquire how matters were going, threatening not to wait much longer, this was the answer given him by the simple mother, who added that in poor Bessy's present state it would be cruel to make a rumpus; and she therefore begged him to do nothing hastily—only to give the young man time, and she hoped all would be right.

And yet Elizabeth Mure, simple as she was, had her own doubts and fears too; but, gentle and timid, she dreaded the consequences of applying to Vincent's father, and preferred waiting in hopes all might come right without proceeding to such extremities. But there was one thing that would not wait,

that could not be deferred—and that was the birth of Bessy's child. Time was advancing, and Uncle Philpots threatening to break out again if Vincent Halloway delayed longer to fulfil his promise. He wrote him a letter to that effect, enclosing it in one to his sister, bidding her deliver it herself, "because he was afraid that little fool Bessy would n't have pluck enough to do it." Bessy did deliver it, however, at her mother's request; and Vincent, with ill-concealed vexation, entreated her to keep her uncle quiet for a little while longer.

"Tell him I'm doing all I can! He seems to think it's an easy matter to persuade my father to do a thing he don't like! Tell him that if he stirs in the business now, he'll spoil all. And I'll tell you what, Bessy, we should have a much better chance by and by, after this business of yours is over. Tell your uncle so, Bessy; it would never do for my father to see you now. It would set him against you, and when once he's set against anybody, there's no bringing him round to do what one will. One might as well try to move Exeter Cathedral. If you could only persuade your uncle to wait till this business is over!" And Bessy, who was frightened to death at "that dreadful old Mr. Halloway," willingly promised what was asked; and even her mother consented to aid her, from an apprehension that if anything occurred to cause Bessy much agitation and distress just now, the consequences might be serious.

Joss was not very easily convinced; his suspicions were beginning to be awakened, or rather to gain strength, for he had never been free from them. He believed, as he told his wife, "that that young jackanapes was trying to slip through their fingers; but he little knew who he had to deal with. If he, Joss Philpots, followed him from Land's End to John O'Groats, he should marry his niece, or he'd know the reason why."

Nevertheless, being a tender-hearted soul at bottom, he yielded so far to the entreaties of his niece and her mother as to postpone the decided steps he meant to take till poor Bessy's confinement was over. He even did more; and at the instigation of Mrs. Philpots, who, although she had spoken tauntingly to Bessy, was not a bad woman at heart, he invited her to come and stay with them, where she could have more comforts than in her own mother's small cottage, as also be removed from the eye of Vincent's father. And to the great relief of the young man, Bessy went, leaving him to the joys of love and the fascinations of Emily Halkelt; and good use he made of his time, for desperation gave him courage. Shy and unused to society as he had hitherto been, his courtship would probably have advanced much more slowly had not the agonizing apprehension of losing Emily and being forced to marry Bessy pushed him on. Knowing little of the world and nothing of the law, he was ignorant how far the latter could reach him; but he felt acutely that he was not sufficiently emancipated from his father's authority to hope to resist it if they came to a contest; whilst the idea of Emily's becoming acquainted with the affair of Bessy Mure filled him with dismay, since he did not doubt that she would instantly banish him her presence forever.

"But," thought he, "if I were once married to my darling Emily, they could do nothing to me then but make me maintain Bessy's child, which I'll do with all my heart. They can't unmarry me again; and if Emily should hear of it after she is

my wife, why, she can't help herself, and she'll be obliged to forgive me."

To hasten on his marriage, therefore, was the object to which he devoted all his skill and energy; and, inspired by the violence of his love, he exerted a great deal more of both than his acquaintance would have given him credit for. But having little influence at home, it was not directly, but indirectly, through Emily and her influence over her father, that he endeavored to gain his point; not only by urging his love and impatience to call her his, but also by working on her fears. It happened that his mother, who had shown herself his best friend during his courtship, was at this time extremely unwell with a malady that might ultimately prove fatal.

"And if my mother dies before we're married," said he to Emily, "Heaven knows when we shall be; perhaps never! My father's so strange in his temper, and so arbitrary that, but for her, I doubt whether he would even have permitted our intimacy to go this length. If my mother dies, he won't choose me to leave him, and even if he did consent to our marriage, he would make it a condition that we should live with him; and I am sure, Emily, you would not like that. For my part, I had rather relinquish you altogether, though I broke my heart afterwards, than to take you to a home where I know you'd be miserable, and where I am sure I should be so too."

And Emily, who was in love, and very willing to be married, and who, from Vincent's description, entertained a horror of the rigorous rule and dull uniformity of old Jacob's *ménage*, fell into his views, and gave him her best support in the siege he laid to Mr. Halkelt's fond paternal heart, who, in conjunction with Vincent's mother, undertook to attack and overcome Jacob—an enterprise, which, but for the temporary revolution wrought in him by political excitement, no man or woman would have ventured to attempt. But the cause of Reform was advancing favorably; the Reformers were gaining such signal victories over their adversaries, that the gloomy spirit of the old Puritan rejoiced, and his close heart opened to more kindly influences. Neither was he insensible to the entreaties of his faithful Rachel, who, under the apprehension that she should not live long, was extremely anxious to see her son married and removed from a discipline, the rigor of which she saw was odious to him, and more likely to terminate in strife and rebellion than in harmony and submission. So, thus beset and taken in a genial hour, Jacob Halloway consented to his son's marriage with his friend Halkelt's daughter, and that an early day should be appointed for the celebration of the wedding.

And now, but for one fell thought, one terrible fear that tugged at his heartstrings evermore, who would have been so happy as Vincent! No longer condemned to his father's dull hearth, almost every hour was spent under the roof of his bride-elect, where Mr. Halkelt considerably appropriated a chamber to his service, that he might not be obliged to return to West Green at night. The mornings were passed in long walks and sweet discourse; and the evenings in cheerful little parties, where Emily shone the fairest of the fair.

As for Bessy, she was still absent; and all he knew about her was, that she was the mother of a boy.

It was just three days previous to the one appointed for the wedding, that Mrs. Mure beck-

oned to him as he rode past her door on his way to Taunton, to tell him that she had just had a letter from her daughter Bessy, who was coming home immediately. Vincent said he would call soon to see her, and rode on; but this intelligence filled him with alarm, and not without reason, for he knew that she had not been expected so soon; and he apprehended that in spite of all his precautions the news of his approaching marriage might have reached her or her uncle, and that they were coming to put in their protest, and claim his promise.

The progress of his courtship had been so rapid that he had hoped to outrun rumor—the more especially as beyond Emily's friends, who were quite unconnected with the humble neighborhood of West Green, he had kept his engagement a profound secret from everybody but his parents, who, in compliance with his request, as well as their own reserved habits, he knew would communicate it to no one.

There was one person, however, who had penetrated the secret—and that was his old confidant, Joe Jebb. Joe, who was something of a veterinary surgeon as well as blacksmith, having been summoned to the vicarage to inspect one of the clerical horses, there fell in with a groom of Sir Walter Lidgate's, who had ridden over with a letter, and was lounging about the stables whilst waiting for the answer. The man having been when a lad in the service of the vicar, was well enough known to Joe, though they had not met for some time. They naturally fell into conversation about former days and old acquaintance, in the course of which the groom made some allusion to Vincent Halloway's approaching marriage with Miss Halkelt. Now Joe was a good deal surprised at this intelligence, and rather displeased than otherwise. Not that he cared anything about Bessy or her misfortunes, but he felt a twinge of envy at Vincent's good luck, of which he thought him the less deserving that he had been for some time past in the gradual process of dropping the young blacksmith's acquaintance; and the reason for his so doing was now plain—Vincent was getting up in the world, and Joe was not genteel enough for him. And Joe was perfectly correct in his conclusions. But for the father's ill-judged restrictions the intimacy would probably have never arisen, for Vincent, could he have selected his acquaintances, would certainly not have chosen Joe; but young people are apt to prefer bad company to none, and Vincent was glad to fly to any resource that made a diversion in the dull uniformity of his home life. Joe Jebb could be no fit society for the fair Emily, and the sooner he could be shaken off the better.

Very shortly after Joe acquired this information Bessy Mure received an anonymous epistle, which in her first transport of surprise and indignation she was about to rush down stairs to show to her uncle; but it so happened that when she reached the bar where he usually enjoyed his grog and meditations, she found nobody there but her aunt. Joss was out, and knowing that Mrs. Philpots' indignation would first find vent in reproaches heaped upon herself, she forbore to mention the subject. This accident gave her time for reflection. Bessy was a simple, uneducated girl, but she wanted neither common sense nor good feeling; and she began to question the prudence of so hastily rousing the slumbering lion of Uncle Philpot's wrath, the more especially as she had no certainty of the correctness of the information the letter conveyed. It occurred to her that it would be better to see Vin-

cent first, and hear what he had to say before she raised the storm; and with this view she wrote to her mother, announcing her immediate return, and by the same post forwarded a few lines to her faithless lover, which she addressed to the silk-mercier's, with whose shop she was well acquainted.

Joss made no objection to her departure; on the contrary, he thought it high time she went to look after her slippery swain, to whom he sent a message, to the effect that if he was not shortly invited to the wedding, he should pay a visit to West Green without an invitation.

So Bessy departed; and in order to spare her the disgrace of appearing at home with an infant in her arms, Mrs. Philpots undertook the charge of it till, as a married woman, she could claim it.

## IV.

When Mrs. Mure stopped Vincent to communicate the news of Bessy's return he was trotting gayly through the village on his way to his bride. He had been two days at home for the purpose of making some final arrangements with his father, and was anticipating with a lover's delight the reünion with Emily, and the pleasures he expected to enjoy amongst a party of young people who were to meet at Mr. Halkelt's that evening—pleasures, the freshness of which was not yet dashed by satiety, whilst their flavor was heightened by long abstinence, and by the peculiar circumstances under which they were first presented him, for they came hand-in-hand with an ardent and well-placed affection. But the few words spoken by Elizabeth lowered his tone in a moment. The blood no longer bounded through his veins, his heart sunk, his limbs grew heavy, and the features that had been lighted up with joy a minute before were overspread with black dismay. The very horse he rode seemed to participate in the sudden depression; the brisk trot slackened, and the head that had been tossing in proud impatience dropped as he jogged sluggishly on.

Emily had been watching her lover from the window fully an hour before he arrived; and when she saw him, after putting up his horse at the Castle, walk with a slack pace and his eyes fixed upon the ground to her father's door, she too felt a momentary sinking of the heart—a presentiment that he was the herald of some evil tidings.

"Is anything the matter, dearest Vincent?" she said, meeting him at the door of the drawing-room, and flinging her fair arms about his neck.

"No, darling; why should you think so?" answered he; but her eyes were peering inquisitively into his face, and his could not meet them.

"I know there is something, Vincent, for all you can say. You cannot conceal anything from me."

"You'll make me think myself very ill presently," said he with the slightest possible shade of temper. "You know there's a great deal in fancy. I believe I am weary of talking of business matters with my father. I assure you a conversation with my father is not the most enlivening thing in the world."

Emily saw she bored him with her questionings, and turned the subject. "Probably," she thought, "his father has not behaved so liberally as he expected about money, and he is vexed, poor fellow! How needlessly, if it's on my account!"

"By the by, dear Vincent, I've got a letter for you—a love-letter, I'm certain by the writing;

and I assure you I've been quite jealous. Let me see, where did I put it?"

"What letter?" inquired Vincent.

"A love-letter, I tell you! The postman left it below in the shop."

"How came the postman to leave my letters here?" asked Vincent with the ready alarm of an uneasy conscience.

"Because it was directed here," answered Emily, opening her work-box. "Oh, here it is! Pray what lady do you correspond with at Wellington, sir?" she asked, examining the postmark.

"Nobody; it must be a mistake," said Vincent, turning pale. "Give it to me!"

"I've a great mind not," she answered, "for I know it's a love-letter, because it's stamped with a thimble, and has three large kisses on it in red sealing-wax!"

"Nonsense, Emily."

"The address is charming," said she, reading it, "and does great credit to the lady of your choice:

To Master  
Vincent Holway

care of Mister Halkut  
on the Lunnun rode silk mercer.  
Taunton."

"Pooh! it's some begging-letter, or some of my father's laborers wanting a place," said Vincent, snatching the letter from her and thrusting it into his pocket unopened. "Come and play me a tune, Emily!"

She looked at him for a moment with grave surprise, and then moved to the piano-forte. His confusion, his paleness, his haste to put the letter out of sight, had converted into certainty what had been but the faintest suspicion. The letter was evidently that of a woman, but it had occasioned her no uneasiness—such a correspondent was not likely to be a dangerous rival; besides, it might relate to fifty things she could not guess, quite unconnected with affairs of the heart; but Vincent's demeanor betrayed him, and stamped the accident with importance. Though it *had* been a foolish love-letter, the last flash of some boyish flirtation, had he but shown it her she would have shaken her pretty head and forgiven; but she did not like the concealment. *She* had no concealments. She had turned her heart and her memory inside out, and let him read the whole contents; and when she seated herself at the instrument the tears were starting to her eyes. But she was too wise and good-tempered to allow these feelings to get the better of her; and, after turning over the leaves of her music-book, in order to gain a little time to recover herself, she looked round to ask him what she should sing, and discovered him standing at the other end of the room with his back towards her and the letter in his hand. She did not see it; but she was sure, from his attitude, that he was in the act of breaking the seal when she spoke. On hearing her voice, however, he crushed the paper in his hand, and, coming forward, desired her to sing what she pleased; but feeling herself too much discomposed to trust her voice, she proposed a walk, and said she would go and put on her bonnet and shawl; and the door had no sooner closed on her than he tore open poor Bessy's epistle, which ran as follows:—

"DERE MASTER HOLWAY—A frend has rote me a letter as your to be maried to Miss Halkut and if

Uncle Philpots heres it he 'll be mad so Ime cumming home by the Bote as passes to-morrow and shal go to my cosens Mrs Wilson Landress whare please call tomorrow nite if you get this or nest mornin or else at home yrs to command

ELIZBETH MURE."

It was then as he thought; and yet not so bad as his fears had painted, since Uncle Philpots, that *bête noire* of his existence, did not appear to be coming; and if not, he might possibly contrive to keep Bessy quiet by persuasion, or by denying the report altogether. There were only two more days to get over, and then he would be safe. Once married, what could they do? This was what he was always repeating to himself, and it was this that made every week which had intervened appear a month. However, on the whole, though he anathematized the officious *friend* who had written to Bessy, he felt somewhat relieved. Uncle Philpots he knew would be unmanageable, but Bessy would be more tractable, more easily deceived. "Yes," he said, as, hearing Emily's foot on the stairs, he thrust the letter into his pocket, "I think I can quiet Bessy."

Still, in spite of his efforts to appear at ease and converse cheerfully as they walked, he was more absent than usual. More or less so he always was; inasmuch that Emily had come to the conclusion that this sort of distraction was the habit of his mind. But all at once, after a silence of some minutes, he started; the movement was almost imperceptible, but she felt it in the arm she was leaning lovingly upon.

"What's the matter, dear?" she said, casting her eyes about in search of the object that had occasioned his emotion.

"Why do you keep asking me what's the matter, Emily?" he said peevishly. "There's nothing the matter."

"I thought you started."

"I did n't start that I know of; but you're growing quite fanciful, I think."

He *had* started though, for it had suddenly flashed across his mind that Bessy had omitted to give him the address of Mrs. Wilson, the laundress. How, then, was he to call on her as she desired, and as he desired too; since to allow her to go home without seeing him might produce very ill consequences? This was a most perplexing difficulty; and the more so because he had so little time at his disposal, for he had no excuse for not attending Mr. Halkelt's dinner-table, as usual, at three o'clock, nor could he escape being present at the tea-party in the evening. It was only during the interval betwixt these two repasts that he could hope to accomplish his object, and it might take him a long time to discover the residence of so obscure a person as Mrs. Wilson. What was to be done? He could not think; and the question so engrossed his mind that Emily found all attempts at conversation so ineffectual, that she relinquished the effort, and walked on in silence, till, drawing out her new watch, a wedding-present from her father, she observed that they had better turn, as they had no more than time to get home before dinner.

As lovers are seldom very conversible people in company, Vincent's abstraction passed unobserved at the dinner-table; and when Mr. Halkelt rose, (and, being a man of business, he did so immediately the repast was concluded,) he made an excuse for a short absence, promising to be back to tea.

Vincent was glad to find himself alone in the

street, because he could think uninterruptedly of the one engrossing subject—What should he do? How find Mrs. Wilson? He had not the slightest idea of whom to inquire her address. He went into a chandler's shop, where a man was engaged weighing out bacon for a customer, who protested against the price. The chandler of course said, that for the quality it was the cheapest bacon he had ever sold, and expatiated on the charms of its color and streaky beauties. When there was a pause in the argument, and whilst the man was enveloping the bacon in a bit of brown paper, he turned to Vincent, and asked him what he should have the pleasure of serving him!

"Did he happen to know where a Mrs. Wilson, a laundress, lived?"

"Don't know, sir, I'm sure," answered the chandler, who thought the question extremely irrelevant. Vincent felt awkward, and the more so that the woman who was buying the bacon turned about and stared at him. His feelings towards Bessy were not improved by this incident, and he coupled her name with no blessings.

Seeing "Mangling Done Here" inscribed over a door below the level of the street, he thought he would try there. The woman was civil, but she did not know Mrs. Wilson. "There were a great many people as took in washing, and there might be one of that name, but she could not tell." A girl who had carried a pair of sheets to be mangled said: "There was a Mrs. Jackson, a laundress, that lived along by the canal;" but that brought him no nearer Mrs. Wilson. Nevertheless this remark was not without its consequences, for the mention of the canal suggested to Vincent that he might possibly see something of Bessy by going in that direction. She had not mentioned what time she should arrive, and the boat might not be in yet. But what boat was she coming by? There were boats coming up all day carrying one thing or another. When he drew near the water he stopped, and asked a man in a blue jacket and trousers, who was standing at the door of a public-house, whether there were any passenger-boats; but the man said he was a stranger in those parts, and could not tell; so he walked on.

What augmented his difficulty was, that the evening was fast closing in; for it was yet early in the year, and there had come on within the last hour a driving mist and a thick atmosphere that made it darker than it would otherwise have been. He could barely distinguish the boats upon the water, and he made some inquiries of a man who was standing by some large bales of goods with respect to any that might have brought a passenger from Wellington. As he spoke he felt some one pull the skirt of his coat, and looking round he saw it was Bessy. She had landed about an hour before, but, having forgotten a bundle, had come back to fetch it.

"I knew it was you by your voice," she said, as he turned and joined her.

"And what has brought you back in such a hurry?" he inquired.

"Uncle Philpots!"

"Is he here with you?"

"No; but he's coming to-morrow, or next day at farthest."

This was an impromptu of Bessy's not strictly consistent with the truth; but, for the sake of all parties, and as the only means of averting worse trouble, she believed Vincent should fulfil his engagement, and quite unable to appreciate his

aversion to doing so, or the force with which he was drawn in a contrary direction, she expected that with a proper exertion of influence he would yield. Uncle Philpots was her strong card, and the question had suggested the answer.

"Uncle Philpots is one as never gives up; and he says he's coming to lay the bit of paper afore the magistrates, and get justice on it."

This he *had* said more than once; he had himself threatened Vincent he would do so if he attempted to back out of the engagement; and as the young man did not know what power the paper gave them to enforce the promise it contained, it was a menace full of terror and horror to him—a terror and horror which seemed to make the black blood of vengeance rush into his veins. He felt like a victim writhing in the folds of a serpent, who, whilst he struggles to be free, longs to clutch in his hard gripe the throat of the hated monster that torments him. His brow was knit, his fist was clenched, his teeth set hard, and the breath came thick from his heaving breast; but he did not speak. The imprecations that rose to his parched lips found no voice; it might have been better if they had. They only choked him, and then fell back upon his heart, to make his blood boil faster.

Thus they walked on by the side of the canal. If Bessy could have seen his face, she might have read something there that would have silenced her; but it was too dark, and besides she did not look at it. Her business was to convince him that Uncle Philpots was coming, and that Uncle Philpots was a person who never desisted, never gave in, till he had gained his point. Bessy was no philosopher; she did not know that the most dire tempests of the soul often find no vent in words, as the bitterest griefs seek no relief from tears. Vincent's patient silence promised well. From Uncle Philpots she went to the baby; it was so like its father; she longed to show it him; Aunt Philpots was to bring it over with her soon; she was sure he would love it; and then it must be christened, and its name should be Vincent. She thought this would touch his heart. Poor Bessy!

Bessy was walking next the canal when she said this, and Vincent, who felt his brain begin to waver, suddenly passed behind her, and placed himself betwixt her and the water. Unfortunately, thinking he was going to escape her, she thrust her arm within his to detain him—a familiarity that produced such an access of rage and disgust that he impulsively flung her off with a violence that made her reel.

"What's that for?" she cried with the rudeness of an untutored mind, and an angry thrust of her vigorous arm.

Then there was an indignant oath—a slight scuffle—a cry—a splash—and Vincent stood bending forward with distended eyes and open mouth, breathless and amazed, staring wildly through the misty dusk into the deep black water. He saw nothing upon the dim surface, and turned round, hoping desperately that he was laboring under an illusion, and half expecting to see Bessy on the dry land. But a strangled scream from the canal recalled his senses; and as he beheld an indistinct object floating far out from the brink he was about to plunge madly in. The object, however, sunk; and at the same moment the noise of hasty footsteps approaching, and the glare of waving lights, appalled him. The horror of his position overpowered his reasoning faculties. The thousand circumstances of suspicion by which he was sur-

rounded—the death-screams of the victim—the fearful temptation to which he might be supposed to have yielded—all swept like a tempest across his brain; and with one more glance at the calm, black, desert waters, he turned and fled from the accursed spot.

V.

There was a gay little party assembled that evening in Mr. Halkelt's drawing-room. The silk-mercier was a man well-to-do in the world, and being exceedingly proud of his daughter, he spared nothing to make his house agreeable to her young friends; so that betwixt his liberality and her merits they had contrived to collect a very respectable circle amongst the middle classes of the neighborhood. On this eventful night all their intimate acquaintances, both young and old, are there, as it is to be the last party before the wedding; and they are all wondering what has become of the bridegroom, especially the dancers, for there being more ladies than gentlemen, he is particularly wanted. They quiz Emily on his desertion, and she threatens to make him expiate his misdemeanor by some heavy penalty. But though she laughs she is not at ease, and those who are best acquainted with her fancy the lovers have had a quarrel; others, who comprehend her less, but still can discern the shadow on her brow, conclude her to be more offended at his absence than she chooses to own. For her own part she connects Vincent's absence with the letter; she feels certain that he is involved in some painful mystery; and a weight is on her heart which she does her utmost to conceal especially from her father, who, however, suspects nothing, and quizzes her more than anybody else.

But by and by one of the maids who is assisting Emily at the tea-table whispers that she has just met Mr. Halloway on the stairs, and that he has gone up to dress. Emily feels the color rush into her cheeks at this intelligence, and her ears grow hot as they listen for the opening of the door. The candidates for tea are standing betwixt her and it, but presently she hears her father's voice saluting Vincent with a "Hollo, young gentleman! where have you been to?" Others surround him, and repeat the question. What he answers she does not hear; but as he advances she steals a glance at his face. Perhaps he never looked so handsome; all the young ladies think so, for he is as pale as marble; and the dark shadows upon his brow and about his eyes, and the stern, concentrated expression of his features, supplying the power in which they are usually deficient, make them fancy he resembles one of Byron's heroes. The fact is the tension still continues—the relaxation of fear has not yet come—he is not yet capable of comprehending his situation—he is stunned—the room and the party have something strange to him—he scarcely knows where he is—he can hardly part his lips to speak in answer to the inquiries of his merry persecutors.

"Come!" said Mr. Halkelt, dragging him forward, "and try if you can make your peace with your liege lady here!"

Emily looked up, as if she had not observed him before, smiled, and nodded; and, drawing a chair beside herself, said: "Come, and I'll give you some tea!" She was not deceived. What had happened she could not tell, but she was sure he was in great trouble—more, it appeared to her now, than any slight female entanglement could account for; and she began to fancy he must be involved in some terrible pecuniary embarrassment which his

father had refused to relieve him from. From whatever quarter the wind had blown that bore this evil fortune on its wings, she saw that a storm was about to break over their heads, and she resolved to stand fast by the husband of her choice, for no mean jealousy racked her: he had probably been faulty, but she did not doubt his love; and she would like to have whispered to him: "Fear not—I am yours through all fortunes; and the errors that others may condemn, I can forgive!"

He sat sipping his tea, while she talked to him in a low voice, asking him who he would dance with; and whether he thought Miss Jennings, the young lady that had come to Taunton on a visit to the apothecary's wife, was pretty; and how he liked Mr. Bartlett's grand satin waistcoat. By this means she relieved him from embarrassment and observation, and kept other people from troubling him. He penetrated her intention, and whilst he admired her forbearance and good temper, he wondered what her thoughts were.

"You had better dance with Miss Cox till I can come," she whispered; "she's a quiet little thing. Jane, come here! here's Vincent wants to dance with you;" and the quadrille being formed, he led her away.

He danced with her and others, but chiefly with Emily, that night; and often, when his hand met hers, he pressed it with fervid emotion. He had never been her equal; indeed, he was far her inferior; and whilst she was a woman, he, though older by three years, was but a boy; partly nature, but still more too rigid training, had kept him so. But though his mind now was in a sort of maze—although he was blind and deaf, and all his senses numbed, so that he had no lively comprehension of anything—though yet he saw not Bessy where she lay upon that muddy bank, with her long hair tangled and dripping over the rope that moors a barge, wherein sit three men playing with a pack of dirty cards by the light of a dusky lantern—although the dim picture is hidden from him, yet he felt there was an angel trying to uphold him in that dark sea that was compassing him about. Never were her tones tuned to so much softness! Never had so much tenderness beamed from that sweet face. As she moved round the room, her eye was ever on him, to comfort and sustain; whilst, with all the tact of a woman, she defended him from the persecutions of civility, and the inexorable hilarity of her father and his friends.

The evening wore through at last; refreshments had been handed about, and the company had departed. Whilst the host and hostess were yet saying "Good-night," Vincent went to the side-board, and drank off a glass of strong brandy and water, which had been mixed by Mr. Halkelt, in the fulness of his hospitality, for somebody who would not take it. Emily's quick eye perceived what he had been doing, for the draught brought back the color to his cheeks; she comprehended the motive too and forbore to disturb the oblivion he was seeking. So, as it was late, and her father was in haste to get everybody to bed, they separated for the night without any attempt at explanation.

Vincent undressed himself mechanically, lay down in his bed, and, still under the influence of the narcotic, fell immediately asleep. But by and by he awoke, dreaming that he met Bessy in the street carrying a bundle, which she opened, displaying to him the livid body of a dead infant; and with a shudder he turned to sleep again. But this

time sleep would not come. In spite of his efforts to suppress them, memory and consciousness would start into vigilance, and suddenly the whole dreadful truth was before him. What truth? Had he done it? He did not know. He only knew that black thoughts had started up like fiends in his mind, that in the midst of them they had struggled, and that she was dead. Then he sat up in bed, and wildly clutched his hair and gnashed his teeth, and thought of all the damning circumstances arrayed against him. How he cursed fate, himself, and her! For as yet there was no pity for that young life lost! No repentance yet for heaven—no tears for earth. It was all wrath, and fear, and bitterness. The horrors that awaited him, the condemnation, the prison, and the scaffold, marshalled themselves in dread array; and when he heard a noise in the street, he thought it was the constables coming to seize him.

The night was not long, for they had retired late, and Mr. Halkelt was an early riser. By and by Vincent heard people stirring in the house—the shutters of the shop were taken down, and the silkmerecer's heavy foot creaked upon the stairs. How often had the young lover leaped joyously out of bed on hearing these signals announcing that breakfast was at hand, when he should be greeted with the glad welcome of his mistress! But now, though weary of the night, he was in no haste to descend. By candle-light, and with so many objects to divert his attention, Mr. Halkelt had neither remarked the pallor of Vincent's complexion, the altered expression of his features, nor the distraction of his manner; but these could hardly escape observation by daylight, with nobody present but himself and Emily. In order, therefore, not to encounter his future father-in-law, he lingered above, laving his face with cold water, till he fancied Mr. Halkelt would have quitted the table, and then went below. Emily was alone, and received him with a kind greeting. She did not ask him how he had slept—his looks told her that—but she tried by tenderness and gentleness to soothe him and win his confidence; and she so far succeeded that the hard, fierce agony of the preceding hours was softened by a burst of tears. Whilst his heart swelled with unutterable anguish, he laid his head upon her bosom, and wept.

"I ask no questions," she whispered; "but if you could tell me, I might be of use. You know you can trust me!"

What a relief it would have been to tell her! But he could only weep and sob, and cover his face with his hands.

"Is there nothing I can do?" she asked.

"Nothing," he said. "I must go away now to West Green: perhaps to return at night, perhaps not. If I don't come, make an excuse for me to your father."

She threw her arms round his neck whilst the tears streamed down her face. "My poor, poor Vincent!" she said, "Oh, if I could but help you!"

He passed hastily through the shop into the street. Luckily Mr. Halkelt was in the counting-house at the back, and did not observe him. He was in the habit of speaking to the young men, but now he only waved his hand, like one too much pressed for time to stay for greetings; and so he strided through the street, his eyes upon the ground, as if engrossed with business of importance; called roughly for his horse, and instead of lounging at the inn-door till it was led out, as he was used to

do, hurried away, saying he would be back in five minutes. He filled up the interval in walking rapidly from street to street, and then returned, mounted, and trotted off. The landlord was at the door with the "Western Times" in his hand, and remarked that the morning was cold; but Vincent only nodded. Who could tell what might be in that paper?

As soon as he had cleared the town he slackened his pace, and tried to think and form a plan of action. He saw that if he could not exercise more command over himself, he should be his own accuser. He must master his agitation, and compose his manner. His mother would observe any change immediately. He must also call on Mrs. Mure. It would be prudent to inquire if Bessy were arrived. He wished, however, to avoid going into her house—a word at the door was better; and he was about to tap his whip against the window, but just at that moment he saw Joe Jebb leaping over a stile into the road, and to escape him he rode forward, resolving to defer his visit to Elizabeth till the next time he passed.

When he reached home his father was in the fields. He had not been expected, and his mother asked him why he had come; adding suddenly, as she looked at him, "You are not well, Vincent?"

"I don't think I am," said he; for the hint was worthy of adoption. "We were up very late last night, and late hours don't agree with me."

"Are you sure that's all? Have you any headache?"

"Yes, I have—I drank some brandy and water, and it was too strong for me."

Rachel, however, did not believe this was all, for she observed that he avoided looking her in the face. "I hope," said she, "nothing unpleasant has happened!"

At this he fired. "What should happen unpleasant? Could n't he have a headache without it's being supposed something extraordinary had happened?" and so forth. Rachel was only the more convinced that something *had* occurred, but forbore to trouble him further.

To escape observation, he retired to his chamber, and, seating himself near the window, resting his burning brow upon his hand, he looked out upon his father's fields. With how much distaste he had many a time surveyed that smiling landscape; for what were its beauties to him who was panting for freedom and for other scenes! He had pined for the world and society, and the pleasures that young people delight in, and despised the measure of peace that contented his parents. What would he have given for that measure of peace now! The tears ran down his cheeks as he reflected how happy he had really been when he thought himself miserable—how calmly he had slept after his day's work—how healthfully awoke! Would he ever sleep or wake so more? Alas, never! Like Macbeth, he "had murdered sleep." He knew nothing of Macbeth; but the truth of the poet is the truth of all times, and the voice that had cried to the Thane of Glamis, "*Sleep no more!*" was as audible to this unhappy boy as it was to him.

Under the window there lay a dog dozing in a gleam of sunshine, and not far from him a kitten was playing with a straw. How happy they were! Everything in the world seemed happy but himself. Absorbed in his wretchedness, he forgot the flight of time, and by and by his mother looked in to say that dinner was ready.

"I am engaged to dine at Taunton," he an-

swered. But his distress was too visible to be denied, and closing the door behind her, she came towards him, entreating him in the tenderest manner that he would tell her what had happened: had he had any difference with Emily? He could only throw himself into her arms and give way to his anguish.

"I can't come down to dinner, mother," he said.

"Tell my father you can't find me."

"I dare not do that," she said, "I'll tell him you are going back to Taunton; but you must come and see him before you go."

Vincent promised he would; and she quitted him, persuaded that he had had some terrible quarrel with his mistress.

As Jacob Holloway generally indulged in a short nap after dinner, Vincent waited till he was likely to be asleep; and then, descending, gently opened the parlor door. Rachel, who was sitting with her spectacles on, reading the Bible, raised her eyes, and then turned them on the old man dozing in his easy-chair. Vincent waited a moment; his father did not stir; his mother nodded assent to the glance which said, "Let me go without waking him;" and he was closing the door, when the old man, roused by the sound, said, "Is that you, boy?"

"Yes, father," answered Vincent, returning and placing himself behind his father. Jacob held out his hand without looking round. "Shall we see you to-morrow?" he asked.

"Yes, father," answered Vincent, thinking an assent most likely to obtain his dismissal.

"Then I'll take my nap now, and keep what I have to say till then. Good-bye, boy; and don't let the love of the world get the better of you, nor think because the sun shines to-day it'll shine always. Keep yourself humble in prosperity, d'ye hear? When man forgets the Lord, the Lord's apt to call him in a voice of thunder."

"Good-bye, sir!" said Vincent; "I'm afraid I shall be late."

Jacob groaned reprovingly as he settled himself to sleep, and Rachel heaved a gentle sigh as she took up her knitting.

To avoid the chance of meeting Joe Jebb, Vincent rode by a by-way to Elizabeth's cottage, and in so doing had to pass the spot that used to be his trysting-place in the days when he dreamed of no greater happiness than the midnight meetings with Bessy Mure. Absorbed as he was with his anxieties and fears, he had not thought of it till his eyes rested on the bank where many a moonlight night they had sat hand in hand, revelling in the present, and forming projects for the future. His heart stood still at the sight of it. Hitherto he had thought of the tragedy only as connected with himself; it was himself he pitied—it was his own peril that engrossed him. But the sight of this spot awakened other feelings. He saw Bessy as she had been when first their love began, with the tender roses of girlhood upon her cheeks, and the bright smile of innocence on her lip; and he recalled the joys of that first harvest-home when she sat beside him, the fairest flower of them all—where was she now!

There is certainly nothing stranger in human life than the birth and death of human passion!

In the midst of all this anguish, however, the instinct of self-preservation never slept. Not to inquire if Bessy had arrived would appear suspicious; and therefore, severe as the trial was, he must call on her mother; so he rode up to the door

and tapped with his whip. Elizabeth opened it herself; but she no sooner saw who it was, than without saying a word she angrily slammed it in his face. He had not the courage to ask her why, and rode on with the addition of a new source of perplexity and trouble. What could have happened since yesterday to offend her? Was it Bessy's non-appearance; and, if so, did she connect it with him? Had Bessy told her that she meant to see him in Taunton? He hoped, however, it was only the news of his marriage that had reached her; for that which but yesterday he had feared so much had now become utterly unimportant. They could not make him marry Bessy now!

He lingered on the road till Mr. Halkelt's dinner hour was over, and till it was dusk, and then entered the town; and, after putting up his horse, proceeded to the silk-mercier's. As he approached the house he saw the errand boy trotting gayly before him with some parcels strapped over his shoulders; and, as he passed through the shop, he heard one of the young men ask the lad, in reference to something the latter had mentioned whilst unstrapping his burthen, "Whereabouts was she found?"

"Just close by Billings' warehouse. A rope caught her, and stopped her from going further;" and, as Vincent closed the door, he heard some one inquire if she was anybody belonging to the town.

This must be Bessy!—she had not sunk to the bottom then! Her body had floated, and ere long her murderer would be sought! He staggered up stairs in the dark, shut himself in his chamber, and fell upon his knees, for hope on earth had forsaken him. He had trusted she might not be found for a long time, or far from the fatal spot; but Billings' warehouse was hard by, and he discerned clearly the chain of evidence that would condemn him. The letter, his late arrival at the party, his distracted manner—all coincident with the crime. Then his inquiries for Mrs. Wilson. He was sure that woman who had stared at him so in the chandler's shop would remember him twenty years hence; and, worse than all, his questions respecting the Wellington boats! And there could be little doubt that the man to whom he was speaking when Bessy came up to him would recall the circumstance, and recognize them both. What should he do? Go and throw himself at Emily's feet, and tell her all, and entreat her to help him to fly. He had no doubt that she would; and he quitted his room, softly descended the stairs, and was just listening at the drawing-room door to ascertain if she were alone, when Mr. Halkelt clapped him on his back with a jolly "hallo," and asked him where he had been all day; adding, "I did n't know you were here! There was a man just now inquiring for you, and they told me below they'd seen you pass through the shop; but the maid said she was sure you were not in the house, and I sent him away." Vincent had no doubt that this was an officer to arrest him; and he firmly resolved, when all the household were in bed, to steal away, and make the best of his road to London, and thence, if possible, across the Channel, even if he begged his way. For the present, however, he could not escape entering the drawing-room, where he found one or two of Emily's relations spending the evening with her—the last but one, as they expected, before her marriage.

Vincent pleaded a violent headache, and Emily, all sympathy and consideration, bore him up as

well as she could; and, perceiving that it was almost impossible his agitation should escape remark, she recommended him to go to bed, that being the best place for aching heads; and, although suffering exceedingly herself from her lover's mysterious distress, she had the virtue and the strength of mind to conceal her own pain, and affect a cheerfulness she was far from feeling, in order to shield him from observation.

After fervently pressing her hand, and looking all the love and thanks his eyes could convey, Vincent availed himself of her counsel, and retired to his chamber, but not to bed. His first business was to write a few lines of *farewell* to Emily. These he sealed, and laid on his dressing-table. He gave no reason for his departure: he only bewailed his wretchedness; said that through his own folly and wickedness he had lost peace and her; and that, though he should love her eternally, she would never see him again. This done, he tied up a few things in a bundle, and then sat down to wait till everybody in the house was in bed. He at length gently opened his door, and listened. Not a sound was to be heard; so he took up his bundle in one hand and the candle in the other, and descended the stairs. There were two ways of egress—through the shop, or through a private door, which last was seldom used except when there was company. It was through this, however, he hoped to escape, as the other could not be unbarred without noise. He advanced on tiptoe towards it, and sought the key, which usually hung at the back of the door; but it was not to be seen, being at that moment securely deposited in the maid's pocket, who lay in the garret.

Here was a dreadful disappointment! He must then try the other way, and he opened the door that communicated with the shop; but in so doing his candle blew out, while at the same instant he felt himself clutched by a powerful hand, and a voice cried: "Villain! I've got you, have I!"

Exhausted by suffering, the shock was too great for his nerves, and instead of the resistance he expected, the porter that guarded the shop, and who mistook Vincent for a thief carrying away his booty in the bundle, felt the body of his prisoner slip from his grasp, and sink heavily on the earth. Whereupon he fetched a light, and, perceiving who it was he had seized, he awakened Mr. Halkelt, who assisted him to carry the still insensible Vincent to his bed. Emily was then roused, and being informed of her lover's condition, and the strange circumstances under which he was found, she expressed no surprise. On the contrary, she said, "It was nothing more than she had been daily apprehending—it having been evident to her that he had for some time been struggling with severe illness, which, from an unwillingness to lie up at such a crisis, he had labored to conceal."

## VI.

Nine days had elapsed since that eventful night when Vincent Halloway opened his eyes after what appeared to him a long, long sleep, in which he had been harassed by the most frightful dreams. He was in the chamber in which he usually slept when at Mr. Halkelt's, and everything was so quiet that he might have thought himself alone but for a low breathing on the other side of the bed-curtain, which shaded the glare of the window from his pillow. He would have drawn it aside to see who was there, but he found he had no power to raise his arm. The attempt, however, had not

escaped the watchful ear of his nurse, and the curtain being lifted, Emily's sweet face looked in upon him. When her eyes met his, she gazed eagerly into them, and then bending down and touching his brow with her lips, she said, "How do you feel, dearest?"

"I don't know," he said. "I believe I'm very weak. Have I been ill?"

"Very ill," she answered; "but you have had a good sleep, and now you are going to get well. Only you must be very obedient, and not talk."

The command was not difficult to obey, for a few words exhausted him, and he was content to be silent. Presently his mother came into the room on tiptoe. Emily whispered her the good news, and she also came to his bedside, kissed him, and blessed him. He was quite easy, and seemed to himself to be lying in a sort of Elysium. So he slept and woke, and sipped things out of a teaspoon which Emily held to his lips, and asked no questions.

Gradually, however, vague recollections of the circumstances that had preceded his illness recurred to his memory; but he could not at first distinguish the real events from the visions of his delirium. Certainly the dreadful scene at the canal seemed too vivid and distinct to be a dream; but if Bessy was dead, and her body found, how came he to be left peaceably under Mr. Halkett's roof? Perhaps because he was too ill to be removed; or had he escaped connection with the terrible event? But as he gained strength, wonder and perplexity, not unaccompanied by alarm, took possession of him; and, in spite of the calm and cheerful demeanor of those about him, he could not divest himself of the hourly apprehension that he should be arrested for the murder of Bessy. As time advanced, however, this fear began to be less urgent, but other anxieties succeeded it. Could he, knowing his dreadful position, dare to marry Emily? Could he allow so lovely, so pure, so noble a woman to ally herself to one who might yet be doomed to the death of a felon? He felt it was impossible. But explanation must be deferred till after his visit to his father's, whither the doctor recommended he should remove for change of air; and Emily, who took the entire command, consented, provided she went with him, for she perceived plainly, as his bodily health was restored, that his mental disease was returning—that he had something on his mind was evident. What could this grievous secret be?

When the day arrived for his removal, a carriage was engaged to convey him. Under other circumstances how delightful such a drive would have been, with the glad feelings of returning health, and Emily by his side! But there was no gladness for him. He thought only of what he was soon to lose, and of the grim future that awaited him.

As they passed Mrs. Mure's door, Nancy ran out to see the carriage. She looked as usual, and he observed that she was not in mourning. He saw some other familiar faces; all nodded and smiled; it was evident that even there, where his connection with Bessy was known, he was not suspected of her murder. Nevertheless, his determination to relinquish Emily remained unshaken.

At first, on his arrival at home, he could not walk further than the garden; but as his strength returned, leaning on Emily's arm, he extended his rambles; and when they had a fine spring morning, they often remained abroad for hours—precious hours!—the last he was ever to taste on earth!

One day when, after a long stroll, they were reposing side by side on a primrose-covered bank, he saw Nancy Mure coming towards him with a white jug in her hand. Emily remarked that she was a pretty girl; and Vincent felt, as she drew near, that he must speak to her. That she expected it was evident, for she stopped.

"How do you do, Nancy!" he faltered out with a husky voice.

"Very well, thankye, Mr. Halloway. I hope you're better."

"Rather better," he answered with a sigh.

"I s'pose you know that Bessy's been very bad, and like to die! I've been up to the farm to fetch a drop of milk for her. She can't take nothing but milk now."

Vincent gasped for breath.

"What has been the matter with her?" kindly inquired Emily.

"She tumbled into the canal at Taunton six weeks ago come Monday, and she caught a cold, and the doctor says it's settled upon her chest."

Emily answered that she would call and see her; and as soon as Nancy was gone, Vincent rose, trembling exceedingly, and said that not feeling very well he wished to go home and lie down. When he found himself alone, his first impulse was to pour out his heart's thanksgiving for Bessy's escape. For a long time he wept and prayed, and as soon as his mind was calmer he wrote to her to request she would see him. It was evident that she had spared him. How could he be grateful enough for so much generosity? How make her amends for his brutality and ingratitude! In the evening Nancy brought a note to say that Bessy could not come out, but that she would be glad to see him if he would call.

He went the next morning, and found her sitting up in bed, pale and hollow-cheeked, the ghost of her former self. When he entered the room, she bade her mother and sister leave them. Vincent fell upon his knees, and covered his face with his hands, whilst the big tears streamed betwixt his fingers. His heart was rent in twain, and he sobbed like an infant in grief.

"Never mind," she said. "Don't take on so! I have n't told nobody, nor never will; and, besides, it was as much my fault as yours. Mother sent for Uncle Philpots when she heard you was a-going to marry Miss Halkett, and he com'd just the next day; and when he found I'd been in the water, he said he knew you had done it; but I turned him off from it with laughing, and said I fell in when I fetched my bundle, 'cause it was so dark."

He thanked her again and again; but how she had escaped he could not conceive. She said that the second time she rose she had caught hold of a rope that moored a barge to the shore, and had tried to reach the land, but that it slipped from her grasp; after which she remembered nothing till she found herself in bed at a little public-house, whither she had been carried. The men in the barge, on coming from below to go ashore, had discovered her with her long hair entangled in the hawser, which had kept her head above water. Her cousin, Mrs. Wilson, surprised at her not returning, had come in search of her, and so learned where she was, and there also Uncle Philpots had found her. She said she had been ill ever since from the cold she caught, and that the doctor said she would need great care.

Vincent answered that she should have great care; for, after what had happened, he should be

an ungrateful scoundrel if he did not devote himself to watch over her health and safety.

But Bessy shook her head and said that could not be.

"It must be!" Vincent answered. "You must be my wife now, Bessy. I am determined to do what is right, and fulfil my promise."

"No, Mr. Halloway," answered Bessy, "I will never be your wife. It would n't be good for you nor me, I know; and perhaps might sooner or later lead to worse than what's gone. It would never do; and I would n't say, if we had words, but I might some time cast up to you about the canal, and about your running away instead of trying to save me. Uncle Philpots and I had words about it; but I told him it was n't no use, for I would n't marry a man as wanted to marry another girl."

And Bessy adhered to her wise resolution.

Vincent was now free to marry Emily; even the child he was not burdened with, Uncle and Aunt Philpots having chosen to adopt it. But was he more worthy to become the husband of a virtuous woman than he was when he believed Bessy was dead? Were the black thoughts of that fatal evening—of that fatal moment—more pardonable because the life he supposed to be sacrificed had been providentially preserved? The struggle of mind these feelings occasioned became dreadful. Whilst he believed Bessy dead there had been no struggle. His path was plain; his duty was clearly to relinquish Emily; his condition was rather that of utter despondency and calm despair. But now another element had been introduced—a small scruple of hope that, setting his mind in a ferment, robbed him of his sleep, and of what little appetite he had recovered, and Emily had the pain of seeing that he was daily losing all the ground he had gained. In short, he became so ill that, for his own part, he thought death was about to relieve him from all his difficulties; and under this persuasion he resolved, before he quitted the world, to make a full confession to Emily. He felt that his own mind would be easier, and also that it was due to her to give her that last proof of his affection and confidence; but it should not be till his end was approaching, when pity would silence reproof, and the horror and aversion she felt she would in mercy forbear to exhibit.

In the mean time Emily had her project too—which was to obtain his confidence; but he always baffled her till one day, when the doctor had quitted the room with a grave face, she reentered it with the traces of tears on her cheeks.

"I see," said Vincent, "what he thinks; but don't grieve, Emily. Depend on it, it is better I should die."

"Why is it better?" she said impatiently. "Why will you persist in making me miserable, for you can't deceive me, Vincent? I know you have something on your mind, and you would rather die than trust me with it."

"Not from want of confidence, Emily," he answered; "but there are things it's hard to confess. I wish to retain your love as long as I can."

"True love is not easily extinguished," she replied.

"But there are things that might extinguish it, Emily. Suppose I had done something very, very bad?"

"I should be extremely sorry, Vincent—extremely sorry indeed; and I should insist on your doing everything you could to repair the wrong."

"But would n't you cease to love me?"

"No," she answered; "for what you may have done, I know not; but I am witness to what you have suffered. Must be a dreadful fault indeed that such sufferings would not expiate."

"I have suffered," he said, "God knows!" And the tears coursed each other down the wasted cheeks. "But there are crimes that I fear no sufferings can expiate."

Emily began to think he must be the victim of some delusion. What crime of so black a die, and yet so secret, could a youth, situated as Vincent was, have committed? But she was resolved, having brought him thus far, not to lose the ground she had gained.

"Upon my word, Vincent," she said smiling, "one would think you had committed a murder to hear you talk!"

"And if I had?" he sobbed, covering his face with his hands.

"Oh God! Vincent," she cried, clasping hers in anguish, "don't say that! You cannot mean it!"

His reply was a relation of the whole circumstances of his acquaintance with Bessy, from the first awakening of his boyish infatuation to the frenzied ideas that had beset him at their meeting by the canal, and the catastrophe which seemed to his affrighted conscience to be their result. He concluded by mentioning the offer of reparation he had now made her, together with the different phases of his own mental struggle; "And you will agree with me now," he said, "that it is better I should die!"

"No," answered Emily weeping, "it is better you should live and repent. Poor, poor Vincent! How little I guessed the weight that was dragging you into the grave!"

The ease of mind that followed this confession soon showed its beneficial effects upon his health, the more especially as there was no relaxation of attention on the part of Emily. She continued to tend him with the same faithful assiduity. Her cheek was paler, her lip was graver, and perhaps she was a little more reserved; but it was not till he was well enough to listen calmly to what she had to say, that she disclosed her views and resolution—a resolution which scarcely surprised him, though a latent hope he had cherished rendered the blow difficult to bear.

"I think Bessy Mure quite right in refusing to marry you," she said; "such a union would be a bond of wretchedness to both. But neither, dear Vincent, must I marry you."

"I knew it!" he cried; "and yet you said that whatever I might have done, you had witnessed my sufferings, and could love me still."

"And so I do," she said. "Why else am I here? As brother and sister we may surely love each other. I was the innocent cause of your hallucination, and depend on it, I will be faithful to you through life, and help you to sustain your burden."

Vincent felt he had no right to complain; but his heart rebelled against this decision. He was angry with the strength of mind that could form it. He said he saw she had never loved him, and was irritable and unjust; thus convincing Emily how wisely she had resolved. But she did not desert him in his weakness. She never ceased to uphold and to fortify him, both by precept and example, and by such proofs of devotion, as at length forced from him the confession that the love that

could afford them must be rich indeed! As this conviction gained on him, he became happier. He began to appreciate the purity and loftiness of her nature, and was proud to be the possessor of such a heart. This feeling reacted on his own character; it elevated him, and made him emulous to render himself worthy of so true and noble an attachment.

In the mean time the world wondered and talked. "Let them talk," she said; "they will weary of us by and by, and find another subject." Of course Mr. Halkelt was surprised and puzzled; he wanted to see her married.

"Never mind, father!" she said. "If I don't marry Vincent Halloway, you will have me always with you; for I shall never marry any one else."

Rachel's woman's heart revealed to her some inkling of the truth—that is, she guessed there had been another love, another engagement; for she too had witnessed her son's anguish. Jacob looked on severely. The Reform Bill being carried, his excitement had subsided, and as he rather despised himself for the relaxations it had won from him, and the follies, as he considered them, into which he had allowed his son to launch, he did not condescend to ask questions, but shut himself up in his austere silence.

Thus passed seven years. Vincent was nearly thirty, and Emily six-and-twenty—he a very different being, both morally and intellectually, from the Vincent of my first chapter. Mrs. Mure was

dead, Nancy was married, and Bessy keeping house for Uncle Philpots, who was now a widower. Jacob was as austere, and Rachel as meek as ever; when Mr. Halkelt, fancying he felt symptoms of declining health, told his daughter one day that he often felt uneasy at the idea of leaving her alone in the world. "You have no relations you would like to live with," he said; "and I cannot tell what you could do if I should die!"

"I hope you will live many a day and year too, dear father!" she replied.

"Well, my love, I hope I may, for your sake; but you know I must die at last, and I want to learn what your plans would be."

"What do you think of my taking a husband?" she asked.

"I wish to goodness you would!" he answered; "but you won't marry Vincent, and you put it out of the power of anybody else to ask you. I assure you the thought of leaving you unmarried often gives me great uneasiness."

"Well, father, as I would n't cause you uneasiness for the world," answered Emily, "suppose you ask Vincent if he will forgive me my caprices, and marry me after all?"

This was the way it came about, and nobody will question what Vincent's answer was. Emily continued to be his good angel after marriage as she had been before; and he was blest in knowing that she was so.

#### PUNCH TO LORD BROUGHAM.

"During the last five or six weeks, he had with the utmost difficulty, and against the opinion of his medical advisers, attended the service of their lordships' house. During the last ten days the difficulty had increased, and become more severe. In the hope of assisting in this great measure, in a cause to which his life had been devoted, he had struggled to the last, until he found he could struggle no more."—*Lord Brougham's last Speech on Law Reform in the House of Lords.*

And is the busy brain o'erwrought at last?

Has the sharp sword fretted the sheath so far?  
Then, Henry Brougham, in spite of all that's past,  
Our ten long years of all but weekly war,

Let Punch hold out to you a friendly hand,  
And speak what haply he had left unspoken,  
Had that sharp tongue lost none of its command,  
That nervous frame still kept its spring unbroken.

Forgot the changes of thy later years,  
No more he knows the Ishmael once he knew,  
Drinking delight of battle 'mongst the peers—  
Your hand 'gainst all men, all men's hands 'gainst you.

He knows the orator whose fearless tongue  
Lashed into infamy and endless scorn  
The wretches who their blackening scandal flung  
Upon a queen—of women most forlorn;

He knows the lover of his kind, who stood  
Chief of the banded few that dared to brave  
The accursed traffickers in negro blood,  
And struck his heaviest fetter from the slave;

The statesman, who, in a less happy hour  
Than this, maintained man's right to read and know,

And gave the keys of knowledge and of power  
With equal hand alike to high and low;

The lawyer, who, unworped by private aims,  
Denounced the law's abuse, chicane, delay;  
The chancellor, who settled century's claims,  
And swept an age's dense arrears away;

The man whose name men read even as they run  
On every landmark of the world's course along,  
That speaks to us of a great battle won  
Over untruth, or prejudice, or wrong.

Remembering this, full sad I am to hear  
That voice which loudest in the combat rung  
Now weak and low and sorrowful of cheer,  
To see that arm of battle all unstrung.

And so, even as a warrior after fight  
Thinks of a noble foe, now wounded sore,  
I think of thee, and of thine ancient might,  
And hold a hand out, armed for strife no more.

*Passages in the Life of Mrs. Margaret Maitland, of Sunnyside.*—This is a very interesting and very good book, intended and well calculated to inculcate good morals and Christian principle. It is written in the style of auto-biography, and there is not a line of it that one would wish to leave unread. There is no vanity, no egotism about it—two things very common in auto-biography, and which, however pleasant, always serve to mar the value of a book. It is Scotch in its character, Presbyterian in its tone, and, unlike many other books of the kind, is so little of a partisan work, that it has not a word of any kind against the established or any other church. The author, whoever she may be, and the author must be a woman, has more of the milk of kindness in her disposition than any writer we have had the pleasure of knowing for some time. D. Appleton and Co.—Boston Cour.

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